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OF THE

Sanitary Commissioner for the Government of Bombay,

1902,

WITH

APPENDICES.

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SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

European and Eurasian Vital Statistics.

1. The European Census population of 1901 in the Bombay Presidency, exclusive of Cantonments in quasi-foreign territory, is 18,804. During the year 1902, 251 births and 302 deaths were recorded against 217 and 251 in 1901. A birth-rate of 13·35 per mille against 11·54 in 1901 and a death-rate of 16·06 against 13·35. By sexes 133 males and 118 females were born against 120 and 97 in 1901, and as regards deaths 189 males and 113 females died against 162 and 89 in 1901.

2. The Eurasian Census population of 1901 is 6,557. During the year 1902 the births registered were 140 against 133 in 1901 and deaths 154 against 180, the rates being 21·35 per mille against 22·84 in 1901 and 23·49 against 27·54. Of those born, 68 were males and 72 females against 66 and 67 in 1901; as regards deaths, 84 males and 70 females died against 95 and 85 in 1901.

Native Population Vital Statistics.

Births.

3. In the Presidency of Bombay, including Sind, during the year 1902, there were 631,393 births registered against 465,647 in 1901. The recorded births for the year under report were thus 165,746 in excess of the number registered in the previous year, and also in excess by 10,384 over the decennial mean ending 1901. In eleven districts only, Khándesh, Násik, Thána, Kolába, Ahmednagar, Poona, Ratnágiri, Bijápur, Panch Maháls, Sukkur and Upper Sind Frontier, did the number of births exceed the deaths.

Number of registered births.

The recorded birth-rate for the year was 34·16 per mille, against 25·19 in 1901 and a decennial mean of 33·06. The number of births recorded during the year was higher than in 1901 in all the collectorates except Kánara and the district of Upper Sind Frontier.

4. The general birth-rate rose during the year owing to the diminishing effect of famine. In Kánara, especially in the forest area, the birth-rate continued low owing to malarious causes. In the Upper Sind Frontier the low birth-rate is due to defective registration.

5. There were 327,549 male and 303,844 female births recorded during the year against 242,382 and 223,265 in 1901. From Annual Form No. I, Appendix III, it will be seen that for every 100 female births 107·80 male births were recorded during the year.

Births by sexes. Annual Form I.

Births by years.

6. The following statement shows the number of births recorded in each year since 1892 :—

1892 ... 650,667	1895 ... 674,304	1898 ... 582,371	1901 ... 465,647
1893 ... 664,305	1896 ... 691,847	1899 ... 685,348	
1894 ... 660,268	1897 ... 629,693	1900 ... 505,662	1902 ... 631,393

Births by months.

7. The monthly distribution of births in 1902, as compared with 1901 and with the monthly mean of the previous ten years, is given in the following table :—

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Mean for 10 years 1892 to 1901	48,963	44,682	49,804	49,362	52,755	53,338	54,842	54,472	53,646	55,261	52,926	50,961	621,011
1901	29,758	25,349	24,840	25,870	29,082	32,893	41,698	47,592	49,733	54,554	52,605	51,673	465,647
1902	50,061	43,115	49,055	51,393	52,515	52,159	53,596	55,488	57,868	58,310	56,330	51,503	631,393

The greatest number (58,310) was registered in the month of October and the least (43,115) in February. The highest and lowest registrations in 1901 occurred in the months of October and March.

Whilst for the decennial 1892-1901 the maximum number of births also occurred in October and the lowest number in February. The rise in the birth-rate from the low rates obtained in the famine years of 1900 and 1901 was marked.

Birth-rates in urban and rural population.

8. The recorded birth-rates among the urban and rural populations of the Presidency were 27·09 and 35·23 against 22·72 and 25·57 in 1901. Except in the Collectorates of Dhárwár, Kánara, Kaira and throughout Sind, the birth-rates were higher among the rural than the urban population. The difference is very marked in the Poona and Násik Collectorates where the rural birth-rates are 40·93 and 45·18 against 14·83 and 22·80 among the urban. The chief cause of the difference in the urban and rural birth-rates is due to defective registration. Plague was a contributory cause. Correct results can never be obtained without compulsory registration. In Sind registration is apparently very defective.

In the Upper Sind Frontier District the birth-rates among the rural and urban populations were nearly the same, *viz.*, 21·41 and 21·44 respectively.

9. In 30 rural registration circles, the birth-rate was above 50 per mille. In 44 it was between 40 and 50 per mille; in 36 it was between 35 and 40; in 34 it ranged from 30 to 35; in 51 it was between 20 and 30; and in 25 it was below 20 per mille. Of these 25 rural registration circles, 23 are in Sind, and of the remaining 2, one in the collectorate of Sátára and the other in Kánara. Under normal conditions the birth-rate of rural circles is probably at least 50 per mille. The rates returned by Sind are abnormally low and mainly due to default in registration.

10. Out of 56 towns and 7 cantonments in the Presidency, 7 had a birth-rate exceeding 40 per mille. Poona, Alibág, Karád, and Kalyán Towns and Ahmedabad, Deoláli, Kirkee and Ahmednagar Cantonments have very low birth-rates. It is notorious many towns do not register their births correctly and until Municipal By-laws are strictly enforced efficiency will not be obtained.

Still-born.

11. During the year 1902, 9,545 children were registered as still-born against 8,688 in 1901, the percentage being 1·51 against 1·86. Of these 5,354 were males and 4,191 females against 4,922 and 3,766 respectively in 1901. The causes of the high "still-born" rate in Bombay Town are complex and require further investigation. They are attributed by the Health Officer to "plague, the laborious occupations of females working under very trying circumstances in mills, factories, &c., and to the age at which women become mothers." It is necessary to point out that the "diagnoses" of still-born cannot be accepted as altogether accurate as the cases are not "certified" by qualified medical men.

12. In Kánara the high still-born death-rate must be ascribed, as I found from a personal investigation into the question many years ago, to be due to the intense malaria of the forest area.

Deaths.

Number of deaths.

13. Among the Native population in the rural, town and cantonment circles in the Presidency 721,462 deaths were registered during the year 1902. In 1901, 686,134 deaths or 35,328 less than in 1902 were recorded.

Of the total deaths registered, 369,491 occurred among males and 351,971 among females against 357,586 and 328,548 respectively in 1901.

Deaths by years.

14. The following statement shows the number of deaths recorded in each year since 1892 :—

1892 ...	611,742	1895 ...	538,540	1898 ...	548,825	1901 ...	686,134
1893 ...	511,831	1896 ...	596,472	1899 ...	672,269	1902 ...	721,462
1894 ...	607,179	1897 ...	749,916	1900 ...	1,318,783		

Death-rate.

15. The death-rate per mille in 1902 was 39·04 against 37·12 in 1901 and a decennial mean of 36·42.

Male and female death-rates.

16. The millesimal rate of males dying to males living was 38·77 and of females dying to females living was 39·32. In 1901 these ratios were respectively 37·52 and 36·70. For every 100 females who died, 104·98 deaths among males were recorded, but these proportions vary considerably as in Bombay City the ratio of males to females death was 134·82, in Karáchi Collectorate 122·90 and Násik 108·70.

Deaths by districts.

17. In the Western, Central, Southern, Gujarát and Sind Registration Districts the number of deaths recorded in 1902 were 188,727, 170,508, 151,785, 133,831 and 76,611 and their ratios per mille 42·71, 35·08, 46·07, 49·54 and 23·90 respectively. The highest death-rate occurred in the Gujarát Registration District, fever causing 26·28 of deaths and plague 6·54. The next highest rate took place in the Southern Registration District which suffered to a considerable extent from plague (18·87).

Deaths by collectorate.

18. In the year 1902 the recorded death-rates per 1,000 of population, which ranged from 63·13 in the City of Bombay to 17·66 in the Upper Sind Frontier, were higher than in 1901 in all the collectorates except Thána, City of Bombay, Kolába, Ratnágiri, Belgaum, Dhárwár, Bijápur, Kánara, Broach, Ahmedabad and the district of Thar and Párkar.

Birth and death-rates compared by collectorates, columns 6 and 7, Annual Form II.

19. Comparing the birth and death-rates in each collectorate for 1902, calculated on the census of 1901, the birth-rate in the City of Bombay was much below the registered death-rate 22·85 and 63·13 respectively ; this may be ascribed partly to plague. In the following collectorates the recorded birth-rates are lower than the registered death-rates :—Sholápur, Sátára, Belgaum, Dhárwár, Kánara, Surat, Broach, Kaira, Ahmedabad, Karáchi, Hyderabad, Lárkána and Thar and Párkar.

Deaths by ages, Annual Form IV.

20. As regards deaths by ages, the figures show per 1,000 living that the largest number of deaths took place in the period "under one year" and the next in the age period "60 and upwards," the lowest ratio being in the period "5 years and under 10."

The total deaths by sexes under the different ages in 1902 in each collectorate are given in Annual Form IV in Appendix III.

Deaths by caste or class.

21. The deaths by caste in each collectorate are given in Annual Form V in the appendix.

By sexes.

The number of male births during the year was 327,549, while the male deaths under one year were 66,115 or 201·85 per 1,000. Among females the numbers were 303,844 and 57,842 respectively, the ratio being 190·36 per 1,000.

The "mortality of infants" as shown by the calculation asked for in Government Resolution, General Department, No. 5192, dated 7th September 1901, is very important, but the data are too inaccurate for correct deductions to be made and are misleading, *e.g.*, Bombay City returns, an infant mortality of 565·93 male and 523·93 female infants per 1,000 registered births; Ahmedabad 317·71 and 314·98 per mille; the whole Presidency 201·85 and 190·86.

Deaths by causes.

22. The subjoined table shows the deaths in 1902 arranged according to causes and contrasted with the results for 1901 and with the mean of the preceding five years. The "causes of deaths" will be briefly noticed in the next section:—

Causes of deaths.	Mean for 5 years, 1897 to 1901.		1901.		1902.	
	Number.	Ratio per 1,000 of population.	Number.	Ratio per 1,000 of population.	Number.	Ratio per 1,000 of population.
Cholera	49,509	2·64	13,600	·74	3,229	0·17
Small-pox	4,568	·24	5,340	·29	2,189	0·12
Plague	78,237	4·17	128,259	6·94	184,752	10·00
Fevers	337,137	17·98	291,951	15·80	270,845	14·66
Dysentery and Diarrhœa	99,186	5·29	60,198	3·26	58,682	3·17
Respiratory diseases...	...	...	...	...	59,379	3·21
Injuries	7,262	·39	7,092	·38	7,434	0·40
Other causes ...	219,286	11·69	179,694	9·72	134,952	7·30
All causes ...	795,185	42·40	686,134	37·12	721,462	39·04

Deaths by months, Annual Form III.

23. The greatest number of deaths (85,005) took place in December and the least (34,462) in June. In 1901 the greatest and least numbers occurred in October (73,187) and June (37,335).

Number of Circles.

24. Statistical returns are received from 220 rural and 56 town circles, from 7 cantonments in British and 8 in foreign territory. The population, according to the Census of 1901, of the rural circles was 16,065,004, of the town circles 2,347,378 and of the cantonments in British territory 68,980, exclusive of Europeans and Eurasians, or a total of 18,481,362.

25. The recorded death-rates among the urban and rural population of the Presidency were respectively 60·22 and 35·85 per 1,000 of population against 57·85 and 34·01 in 1901. Among the rural population the death-rate was higher than in the urban population in the Collectorates of Dhárwár, Kánara and Broach, *vide* Table VI in Appendix III.

Death-rate in rural circles.

26. In 63 tálukas (rural registration circles) the death-rate was over 40 per mille. In 46 the death-rate was between 30 and 40 per mille, in 42 it was between 25 and 30, in 34 between 20 and 25, and in 35 the death-rate recorded was below 20 per mille.

Death-rates in town circles.

27. Very high death-rates are shown in town circles, no less than 26 towns showing death-rates over 60 per 1,000—of these Yeola in the Western District records 185·22, and Gokák in Southern District follows next with 153·14. The Deputy Sanitary Commissioners, Western and Southern Registration Districts, attribute these high rates as chiefly due to plague.

Death-rate in Cantonments in British territory.

28. During the year under report, the recorded death-rate per 1,000 of population from all causes in Devláli was 33·52, Málegaon 38·80, Ahmednagar 10·61, Poona 23·43, Kirkee 21·58, Belgaum 53·99 and Ahmedabad 14·34.

Cantonments in Quasi-Foreign Territory.

Statistics of Cantonments in quasi-foreign territory.

29. The following table shows the vital statistics of the civil population of those cantonments which are situated in quasi-foreign territory. The total number of births registered in these cantonments during the year 1902 was 2,676 against 1,997 in 1901, the birth-rate being 22·16 per mille against 16·54 in 1901. The recorded birth-rates in 1902 were higher than in 1901 :—

Cantonments.	Ratio per 1,000 of Population.	
	Birth-rate in 1902.	Birth-rate in 1901.
Aden (Municipal limits)	20·15	18·80
Baroda	19·23	15·90
Bhúj	21·59	8·10
Deesa	17·28	10·51
Mhow	14·08	10·16
Nasirabad	37·30	24·85
Neemuch	26·67	17·71
Rájkot	26·63	14·79

30. The total number of deaths in these cantonments during the year 1902 was 3,592, equal to a ratio of 29·75 per mille, against 3,688 or 30·55 in 1901. No deaths from cholera and small-pox were recorded during the year. The deaths from fevers were 1,963 or 16·26 per 1,000 of population against 2,035 or 16·85 in 1901. From dysentery and diarrhœa, there were 166 deaths against 198 in 1901. Injuries caused 24 deaths against 61 deaths in 1901, and the number from other causes amounted to 1,439 against 1,379 in 1901. In the cantonments of Aden, Bhúj and Rájkot, the recorded death-rates in 1902 were higher than in 1901. In the cantonment of Mhow, the recorded death-rate in 1902 was the same as in 1901. In the remaining cantonments they were lower.

31. The following table shows deaths from all causes : —

Cantonments.	Population according to Census of 1901.	Area in square miles.	Average population per square mile.	Number of births.	Ratio of births per 1,000 of population.	Number of deaths from							Ratio of deaths per 1,000 of Population.						
						Cholera.	Small-pox.	Fever.	Dysentery and Diarrhœa.	Injuries.	Other causes.	All causes.	Cholera.	Small-pox.	Fever.	Dysentery and Diarrhœa.	Injuries.	Other causes.	All causes.
Aden. Municipal limits .	36,323	67·	5·37	732	20·15	...	...	416	113	10	623	1,162	...	...	11·46	3 11	·28	17·15	31·99
Aden. Purely civil population of Cantonments	206	7·	·28	1	4·85	...	...	3	1	...	5	9	...	...	14·56	4·85	...	24·27	43·69
Baroda	2,704	1·	27·04	52	19·23	...	...	20	3	...	52	75	...	...	7·40	1·11	...	19·23	27·74
Bhúj	741	1·16	638·79	16	21·59	...	...	9	...	1	8	18	...	...	12·15	...	1·35	10·79	24·29
Deesa	8,566	5·	1,713·20	148	17·28	...	...	194	9	1	58	262	...	...	22·65	1·05	·12	6·77	30·59
Mhow	34,740	6·	5,790·	489	14·08	...	...	644	6	4	235	889	...	...	18·54	·17	·12	6·76	25·59
Nasirabad	22,494	8·58	2,621·68	839	37·30	...	...	366	32	6	293	697	...	...	16·27	1·42	·27	13·03	30·99
Neemuch	14,624	4·52	3,235·40	390	26·67	...	...	307	2	2	157	468	...	...	20·99	·14	·14	10·73	32·00
Rájkot	338	·56	602·58	9	26·63	...	...	4	...	...	8	12	...	...	11·83	...	...	23·67	35·50
Total ...	120,736	100·82	17,870·65	2,676	22·16	...	...	1,963	166	24	1,439	3,592	...	...	16·26	1·37	·20	11·92	29·75

SECTION VI.

HISTORY OF CHIEF DISEASES.

CHOLERA.

Mortality in 1902.

32. In the year 1902, there were 3,229 deaths recorded as due to cholera compared with 13,600 in 1901. The disease was somewhat severe in the collectorates of Karáchi and Hyderabad, where 1,981 or 4·47 and 1,078 or 1·09 deaths per 1,000 of population took place, respectively. Bombay City gave a few deaths every month, but the total for the year amounted to only 75. The collectorates of Sholápur, Sátára, Ratnágiri, Dhárwár, Bijápur, Panch Maháls and Lárkhána were entirely free; practically also Násik, Kolába, Ahmednagar, Belgaum, Surat and Upper Sind Frontier, as only 1 death was reported from each of these collectorates. Thána and Broach gave 3 each. Ahmedabad 5, Poona 6, Kaira and Thar and Párkar 10 each, Sukkur 11, Khándesh 15 and Kánara 26.

Monthly mortality.

33. In December 1901, the only area affected by cholera was the City of Bombay, but in January of the year under report, the collectorates of Belgaum and Kánara were affected in addition and 31 deaths were reported in the month. In the months of February, March and April there were 28, 20 and 22 deaths, respectively reported, but in May the mortality rose to 141 deaths out of which 132 were registered in the collectorate of Karáchi. In the month of June the collectorate of Hyderabad was affected and the mortality increased to 701 deaths in this month reached its maximum in July, in which month 1,676 deaths were recorded. The number of deaths then suddenly fell to 579 in August and continued falling to the end of the year, there being 121 deaths in September, 13 in October and 2 in November. In the month of December 5 deaths were recorded, 4 in the City of Bombay and one in the collectorate of Ahmednagar.

Mortality by seasons.

34. In the year under report, the greatest number of deaths 2,967 occurred in the rainy season of 122 days against 3,371 during the same period in 1901. Whilst in 1901 the greatest number of deaths 5,319 took place in the cold season of 121 days, during the year under report only 84. 163 deaths were recorded in the hot and dry season of 61 days against 4,682 in the same season last year. In the hot and damp season of 61 days (October and November) 15 deaths were recorded against 228 during the same season of 1901.

Mortality for 20 years from 1883 to 1902, inclusive.

35. The following table shows the total number of deaths from cholera in each of the twenty years ending 1902:—

1883	...	37,954	1888	...	36,500	1893	...	18,853	1898 ...	4,368
1884	...	13,804	1889	...	32,431	1894	...	33,588	1899 ...	8,579
1885	...	37,287	1890	...	3,259	1895	...	8,890	1900 ...	163,889
1886	...	167	1891	...	17,850	1896	...	35,404	1901 ...	13,600
1887	...	25,711	1892	...	42,900	1897	...	57,109	1902 ...	3,229

Death-rate by collectorates.

36. Eighteen collectorates were affected by cholera, but in 16 of these the death-rate per mille was very trivial. Of the remaining two collectorates, Karáchi and Hyderabad which were entirely free last year recorded a death-rate of 4·47 and 1·09, respectively. The average death-rate per mille for the whole Presidency was this year 0·17 against 0·74 in 1901.

Mortality in rural circles.

37. Out of 220 rural circles or tálukas, 34 were affected by cholera during the year against 65 in the previous year. The disease principally prevailed in 9 of these and gave a ratio of above 2 per 1,000 of population. The tálukas of Ghorábári and Tatta in the district of Karáchi suffered somewhat severely and gave 345 and 408 deaths or a ratio of 9·93 and 9·77 per 1,000 of population, respectively. The tálukas of Sákro and Mirpur Batoro in the same district recorded above 200 deaths each or a death-rate of 7·83 and 6·74, while the táluka of Jati, also in the same district, recorded a death-rate of 5·73 per 1,000 of population. In the collectorate of Hyderabad the highest number of deaths 300 or 3·05 per 1,000 of population was recorded in the táluka of Hála and the tálukas of Guni and Tando Bago of the same district followed it with 222 or 2·43 and 178 or 2·38 deaths per 1,000 of population, respectively. The táluka of Sujával in the collectorate of Karáchi gave 94 deaths with a death-rate of 2·83.

Out of the 34 tálukas affected by cholera, 10 were affected in Hyderabad, 9 in Karáchi, 2 in each of the collectorates of Khándesh, Thána, Kánara, Broach and Ahmedabad and 1 in each of the collectorates of Násik, Kolába, Kaira, Thar and Párkar and Sukkur.

Mortality in towns.

38. Out of 56 town circles in the Presidency, 8 were affected by cholera during the year against 18 in 1901. The largest number of deaths 354 or 3·14 per mille was recorded in the town of Karáchi. In Hyderabad 167 or 2·43 deaths per 1,000 of population took place. The City of Bombay recorded 75 deaths against 197 during the previous year. Six deaths occurred in the City of Poona, while in the remaining four towns Ahmednagar, Bulsár (Surat District), Ahmedabad and Jacobabad there was only 1 death recorded in each.

Cholera in cantonments.

39. Out of the 7 cantonments in the Presidency, only Belgaum was affected by cholera with 1 death.

Villages affected by cholera.

40. The affected area included 378 or 1·46 per cent. out of 25,846 villages in the Presidency against 916 in 1901. The highest percentage took place in the collectorate of Karáchi in which 228 or 36·08 per cent. of villages were affected. In the collectorate of Hyderabad, there were 128 or 9·07 per cent. of villages affected and in the remaining collectorates the number of villages affected were below 1 per cent.

Collectorates in which cholera first appeared in towns and cantonments.

41. Cholera was present in the Bombay Collectorate on the 2nd January 1902, attacked Belgaum Cantonment on the 9th idem, Surat on 28th February, the Upper Sind Frontier on 23rd August, Poona 27th July and Ahmednagar 8th December.

Collectorates in which cholera first appeared in villages.

42. The collectorates in which the disease first appeared in villages were as follows:—Ruikhed in Khándesh, 2nd February 1902; Kalkhode in Násik, 8th September; Nowpáda in Thána, 19th March; Mátherán in Kolába, 15th September; Majali in Kánara, 1st January; Ankleshvar in Broach, 18th March; Khedasa in Kaira, 15th April; Loya in Ahmedabad, 24th March; Tatta in Karáchi, 30th April; Hájipur in Hyderabad, 19th June; Rajar in Thar and Párkar, 15th July; Rohri in Sukkur, 26th July.

It will be observed there were a large number of widely spread foci of the disease which did not spread to any extent during the year under report. The percentage of villages under attack being only 1·46.

Attacks and deaths.

43. The mean percentage of deaths to attacks from the returns received amounts to 73·11. In the collectorates of Násik, Thána, Kolába, Ahmednagar, Poona, Belgaum, Surat and Upper Sind Frontier in which the cases were very few, in all only 14 the percentage of deaths to attacks was cent. per cent., all cases being fatal. Among the remaining collectorates, Bombay City shows the highest percentage of 88·24 followed by Hyderabad and Karachi with 75·76 and 71·70, respectively. In the

Collectorate of Khándesh, the mortality was the lowest, being 50 per cent. of those attacked. It is highly probable all cases in the above statement were not recorded thus raising the fatality rate. Such rates as 88·24 per cent. only occur in exceptionally severe epidemics. The average death rate of cholera works out at about 50 per cent. taking one epidemic with another over a series of years.

Cholera-producing causes.

44. The Deputy Sanitary Commissioner, Sind Registration District, writes: "As to the original source from which the disease was imported into the Province no definite information could be obtained. Very careful enquiries were made, and they lead to the opinion that most probably the disease was imported by immigrants entering Sind *viâ* the Thar and Párkar District."

Small-pox.

Small-pox mortality.

45. There were 2,189 deaths from small-pox (1,132 males and 1,057 females) against 5,340 in 1901, and a decennial mean of 4,106.

Small-pox deaths since 1891.

46. The number of deaths registered under this head since 1891 is as follows:—

Years.	Number of deaths.	Years.	Number of deaths.
1891	1,491	1897	3,835
1892	2,770	1898	1,834
1893	3,567	1899	1,946
1894	3,155	1900	9,885
1895	2,229	1901	5,340
1896	6,443	1902	2,189
	19,655		25,029

Deaths by Districts and Collectorates.

47. The mortality from small-pox, although less than that of 1901, and also of the mean for ten years ending 1901, was higher than that of the years 1898 and 1899. The Gujarát Registration District, except Surat, was free from the disease. The Southern Registration District recorded the highest mortality—979; next in order comes Western with 700, Sind with 362, Central with 115 and Surat in the Gujarát Registration District with 33.

Deaths by age.

48. In the year under report 25·58 per cent. of deaths occurred amongst infants under 1 year of age, whilst 39·30 per cent. took place among children 1 to 10 years, the remaining 35·12 being among persons over 10 years of age.

Fever.

Fever mortality.

49. There were 2,70,845 deaths registered under the heading "Fever" (139,817 males and 131,028 females) against 291,951 in 1901: thus there was a decrease of 21,106 deaths compared with the previous year; the decennial mean is 410,625, which includes the deaths from plague for the past six years.

Fever deaths since 1891.

50. The number of deaths registered from fever in each year since 1891 was as follows:—

Years.	Number of Deaths from Fever.	Years.	Number of Deaths from Fever.
1891	368,913	1897	405,652
1892	438,038	1898	216,324
1893	361,160	1899	228,438
1894	429,094	1900	543,319
1895	388,843	1901	291,951
1896	410,143	1902	270,845
Total ...	2,396,191	Total ...	1,956,529
Mean ...	399,365	Mean ...	326,088

Deaths by districts and collectorates.

51. The death rate under the heading "Fever" was 14·66 per mille as compared with 15·80 for the previous year and a decennial mean of 21·86, and this includes the deaths from plague during the years from 1896 to 1901. Like the year previous, the Gujarát Registration District recorded a high death rate, but much lower than that of 1901. The mortality for the district was 70,978, next comes Sind with 59,811, Western with 56,684, Central with 51,302 and Southern with 32,070.

In the collectorates of Ahmedabad, Broach, Lárkána, Kaira, Panch Maháls and Thar and Párkar high ratios are observed; this result is due apparently to famine causes to a certain extent.

Death by months.

52. The number of deaths during the first six months of the year was lower than in the corresponding months of the previous year. The lowest mortality, 15,109, was reported in June, and it gradually rose month by month till November when the highest mortality, 32,012, was recorded and declined in December when 29,166 deaths were recorded.

Rainfall.

53. *January.*—Rain fell in light to moderate showers between 6th and 10th in Khándesh, Násik, Ahmednagar, east of Poona and Sátára, and in Gujarát, except Ahmedabad.

February.—No rain fell except at Edalabad in the Khándesh District.

March.—Rain in light showers fell on 16th, 26th, 30th and 31st in a few isolated places in the Karnátak and Kánara; none elsewhere.

April.—Rain in light to fair showers fell generally between 1st and 9th and on 16th and 17th in the Dhárwár and Bijápur districts. In the Deccan the fall was light and local, but in the whole of the Karnátak and in Kánara it was considerable (0·50″ to 3·40″) and general. In Gujarát there were scattered showers in Kaira and Ahmedabad districts.

May.—Rain in light to moderate showers fell in the Deccan, Konkan, and in Belgaum, Dhárwár and Bijápur. No rain in Gujarát except a few cents in parts of Kaira and Ahmedabad.

June.—The monsoon current was throughout the month very weak, and the rain appears to have been due to cyclonic disturbances. It, however, extended over large areas and afforded sufficient moisture for sowing operations except in Gujarát. In the Deccan the rainfall of the month was generally far below the average. In the Karnátak generally up to or in excess of the average. In the Konkan, except in parts of Kánara, where it was a little above the average, the month's rain was much in defect. In Gujarát the fall was exceedingly inadequate.

July.—In the Deccan the month's rainfall was up to or a little in excess of the average in Khándesh, the eastern tálukas of Násik, major portion of Ahmednagar, Poona and Sátára districts; elsewhere in the Deccan it was short of the usual fall. In the Karnátak, rain during the month was up to or above the

average in portions of Dhárwár, the whole of Belgaum. In Bijápur and the eastern portions of Dhárwár the fall was very meagre.

Konkan.—Rain above the average in Kánara and the three southern tálukas of Ratnágiri; elsewhere in the Konkan the fall was much under the average.

Gujarát.—The fall of the month was much under the average except in some parts of Surat, Broach and the Panch Maháls.

August.—Deccan and Karnátak. Month's rain generally under average.

Konkan.—The month's rainfall under average except at Uran in Kolába District and part of Thána District.

Gujarát.—Total rainfall everywhere in excess of the average.

September.—Deccan. The month's rain above the average in West Khándesh, western parts of Násik, Poona and Sátára, parts of Ahmednagar and Sholápur. Elsewhere it was in defect of the usual fall.

Karnatak.—The total fall of the month everywhere in defect of the average except in parts of Dhárwár and Belgaum.

Konkan and Gujarát.—The month's rain much in excess of the average throughout.

October.—Deccan. The month's rain was in excess in most of Khándesh and part of Sátára; elsewhere below.

Karnátak.—Rain during the month exceeded the average in Belgaum and Dhárwár Collectorates. In Bijápur it was in defect.

Konkan.—With the exception of the up-land tálukas of Kánara and four tálukas in Ratnágiri and two in Thána, the month's rainfall was below the average everywhere. In Gujarát, the month's rain was less than half an inch in Surat and parts of Broach; elsewhere none.

November.—Deccan. Except in parts of Sátára the month's rainfall was in excess of the average.

Karnátak.—The rainfall of the month exceeded the average in parts of Belgaum, Bijá pur and Dhárwár districts; elsewhere under the average.

Konkan.—The month's rainfall was in excess of the average at a few stations in each district; elsewhere below the usual fall.

Gujarát.—No rain except a few light showers in the south of Surat.

December.—Rain fell in light to heavy showers on the 12th and 13th in Gujarát and between 7th and 19th elsewhere.

Plague.

Deaths from plague.

54. During the year under report 184,752 deaths were recorded from plague—an increase of 56,493 deaths as compared with the previous year.

Plague deaths since 1896.

55. The number of deaths ascribed to plague in each year since 1896 is as follows:—

Year.	Number of deaths from Plague.	Year.	Number of deaths from Plague.
1896...	2,086	1900	33,196
1897...	46,944	1901	128,259
1898...	86,191	1902	184,752
1899...	96,596		

The mortality from this disease during the year was the highest recorded since its first appearance in 1896. All the Collectorates in the Presidency, except Upper Sind Frontier, were affected.

Deaths by collectorates and districts.

56. The Collectorates most affected were those of Sátára, Dhárwár, Belgaum, Khándesh, City of Bombay, Násik and Kaira, with a death rate of 29·37, 29·38, 27·42, 17·58, 18·13, 11·90 and 11·71 per 1,000 of population respectively. In the other Collectorates the death rate from this cause varied from 8·89 in Poona, 8·36 in Sholápur, 7·87 in Panch Mahals to 1·05 in Ahmedabad, 0·36 in Ratnágiri and 0·01 in Larkána and Sukkur. The Collectorate of Panch Mahals, in which 1 death was reported during the previous year, returned 2,055 deaths, followed by Ahmednagar with 1,083 against 20 deaths during 1901. The rates per mille for the various Registration Districts were as follows:—

Western 11·59, Central 10·28, Southern 18·87, Gujarát 6·54 and Sind 1·16.

Monthly mortality.

57. In January there were 16,753 deaths reported, and during March the number rose to 18,089. In April there was a substantial fall, which continued till June when the minimum (1,539) was reached. In July the mortality again rose and continued to increase, except a slight fall in November, till December when the maximum number 30,507 was registered.

There were 2,694 towns and villages or 10·38 per cent. affected by the epidemic against 1,582 or 6·10 per cent. during the previous year.

Dysentery and Diarrhœa.

Deaths from dysentery and diarrhœa.

58. Dysentery and diarrhœa caused the deaths of 31,333 males and 27,349 females, or a total of 58,682 persons against 60,198 in 1901 and a decennial mean of 67,036, a decrease of 1,516 against last year and 8,354 less than the decennial mean.

Deaths since 1891.

59. The number of deaths ascribed to dysentery and diarrhœa in each year since 1,891 is as follows:—

Year.	Number of deaths from dysentery and diarrhœa.	Year.	Number of deaths from dysentery and diarrhœa.	Year.	Number of deaths from dysentery and diarrhœa.
1891... ...	37,728	1895 ...	35,348	1899 ...	74,736
1892... ...	35,406	1896 ...	36,046	1900 ...	218,243
1893... ...	32,965	1897 ...	85,966	1901 ...	60,198
1894... ...	34,667	1898 ...	56,789	1902 ...	58,682
Total ...	140,766		214,149		411,859
Mean ...	35,192		53,537		102,965

The deaths ascribed to "dysentery and diarrhœa" during the six years preceding 1897 showed only slight variations, but have since 1897 shown a great increase. In the Famine year of 1897 there was a sudden increase which is but natural in a year of scarcity, and was repeated to an even greater extent in the year 1900, but in the following year there was a decrease, and in the year under report these deaths fell below the deaths recorded in the previous year and also the decennial mean.

Deaths by districts and collectorates.

60. The Western Registration District records the ratio of 5·15 per 1,000 of population against 4·50 in 1901 and 4·93 the decennial mean. The Central Registration District comes next with a ratio of 4·68, the Southern Registration District 2·57, the Gujárat Registration District 1·44 and the Sind Registration District 0·26. In the Presidency the rate was 3·17 against 3·26 in the

previous year and a decennial mean of 3·56. All the collectorates, excepting Khándesh and Sholápur, show lower ratios; the highest ratio (8·12) was recorded in the collectorate of Khándesh, followed by Sholápur, Násik, Poona, Ahmednagar, Bombay and Belgaum. The recorded death-rates were 6·37, 5·99, 5·91, 5·45, 4·74 and 3·98, respectively, while in Sátára, Ratnágiri, Bijápur and Kolába they were between 2 and 4 per 1,000 of population.

Deaths by months.

61. In each of the months from January to July the deaths ascribed to these causes were lower than those of the previous year and were also lower than the decennial mean in the months from February to September—the month of May excepted; but in the month of October, November and December the deaths were higher than those of the previous year and also of the decennial mean.

Injuries.

Deaths from injuries.

62. During 1902, 4,107 males and 3,327 females, or a total of 7,434 persons, met with violent deaths. The mortality from these causes is higher by 342 than that reported in 1901, and also higher than the decennial mean of 6,629.

Deaths since 1891.

63. The number of deaths registered from injuries in each year since 1891 is as follows:—

Year.	Number of deaths from injuries.	Year.	Number of deaths from injuries.	Year.	Number of deaths from injuries.
1891	5,887	1895	6,051	1899	7,102
1892	5,432	1896	6,288	1900	8,224
1893	6,144	1897	6,907	1901	7,092
1894	6,117	1898	6,984	1902	7,434
Total ...	23,580		26,180		29,852
Mean ...	5,895		6,545		7,463

Deaths from injuries in 1901 and 1902 arranged by sexes.

64. The deaths from these causes for the last two years, arranged by sexes, are shown in the following table:—

	1901.			1902.		
	Males.	Females.	Total	Males.	Females.	Total.
Drowning	1,356	1,782	3,138	1,388	1,854	3,242
Poisoning	87	34	121	82	46	128
Hanging	123	64	187	125	89	214
Wounding	593	248	841	616	242	858
Wild-beasts	109	59	168	106	46	152
Snake-bite	780	419	1,199	824	464	1,288
Railway...	30	13	43	26	8	34
Other causes	929	466	1,395	940	578	1,518
Total ...	4,007	3,085	7,092	4,107	3,327	7,434

65. From the above table it will be seen that during 1902 there is an increase under each, except wild-beasts and railway.

Deaths by districts and collectorates.

66. The number of deaths during the year in fifteen collectorates was greater and in ten less than the previous year. The highest number of deaths (719) was recorded in the city of Bombay and the lowest (62) in the Upper Sind Frontier district.

67. As usual the largest number of deaths from snake-bite occurred in the rainy season.

Snake-bite by collectorates.

68. In all collectorates, except Násik, Kolába, Ahmednagar, Ratnágiri, Kánara, Hyderabad, Sukkur, Lárkána, Upper Sind Frontier and Thar and Párkar, there is an increase in the number of deaths from this cause as compared with the previous year. The highest number of deaths (231) was recorded as usual in the collectorate of Ratnágiri, followed by Thána and Hyderabad with 151 and 123 deaths respectively. The collectorate of Thána, which usually yields a large number of deaths, gave 14 deaths more than the previous year. The total figures for the year show an increase of 89 deaths over the previous year. The city of Bombay recorded only 7 deaths, the lowest in the presidency.

Details of injuries.

69. Of 3,242 deaths by drowning 246 were suicidal, 2,868 accidental and 128 are entered as "otherwise." The latter heading means that when the return was submitted, no decision had been come to as to whether these deaths were "suicidal" or "accidental." During the year under report the number of deaths reported from Karáchi was 439 while it was only 142 in the year 1901. This sudden increase in the number of deaths is apparently due to the severe cyclone that visited the Karáchi District in the month of May.

The unprotected state of many wells and tanks accounts for so many cases of accidental drowning.

Other causes.

Other causes.

70. The recorded deaths from causes other than those specified, number 134,952, or 18·71 per cent. of the total deaths, of which 67,052 occurred among males and 67,900 among females. The number of deaths under report do not include the deaths (59,379) from respiratory diseases as was the case last year.

Deaths by districts.

71. The highest number of deaths (17,548) was recorded in the city of Bombay followed by Dhárwár and Belgaum with 14,670 and 12,524 respectively, and the lowest (158 and 136) in each of the districts of Thar and Párkar and the Upper Sind Frontier.

Deaths from other causes since 1891.

72. The number of deaths registered from other causes in each year since 1891 was as follows :—

Year.	Number of deaths from other causes.	Year.	Number of deaths from other causes.	Year.	Number of deaths from other causes.
1891	81,263	1895	97,104	1899	254,872
1892	87,196	1896	100,112	1900	342,027
1893	89,142	1897	143,503	1901	179,694
1894	100,558	1898	176,335	1902	*134,952

* Do not include deaths from respiratory diseases as those of the previous year.

Under this heading all deaths are included which cannot be classed under cholera, small-pox, fever, plague, dysentery and diarrhœa, injuries and respiratory diseases. The information obtained under this heading is of little scientific value, as the causes of death are not differentiated by the local Registrars.

Respiratory diseases.

Respiratory diseases.

73. The deaths recorded from respiratory diseases number 59,379, of which 30,743 occurred among males and 28,636 among females.

Deaths by districts.

74. The highest number of deaths (7,745) was recorded in the Kaira District followed by Surat and Khándesh with 6,403 and 4,416 respectively, and the lowest 21, 5 and 3 in each of the districts of Lárkána, Upper Sind Frontier and the Thar and Párkar.

SECTION VII.

GENERAL HISTORY OF VACCINATION.

75. This section has been omitted from this report and appears separately.

SECTION VIII.

SANITARY WORKS, MILITARY.—No remarks.

SECTION IX.

SANITARY WORKS, CIVIL.

76. During the year ending 31st March 1902 there were 165 Municipalities in the mofussil with a population, according to the Census of 1901, of 2,349,729 souls; the total income of these Municipalities amounted to Rs. 6,223,667. Out of this sum Rs. 1,422,475 were expended on improving water-supply, drainage and conservancy within municipal limits.

77. There are 23 District Local Boards with 207 Táluka Local Boards; the entire income of these Boards during the year ending 31st March 1902 amounted to Rs. 4,438,842, and out of this sum Rs. 161,172 were expended on water-supply and drainage.

78. The Bombay Village Sanitation Act of 1889 has been introduced into 294 villages, there being an increase of only 2 in the number this year. It would appear that owing to famine and plague, which claim the attention of the district officers, no progress has been made.

79. The number of selected villages in which the Village Sanitary Inspection Book has been introduced stands at 3,321; of this in about 1,518 villages the book has been written up by the officers of the Sanitary Department.

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

80. The famine in Gujarát and the Deccan continued, and at one period of the year there was great apprehension that not only would the food scarcity continue but that in Gujarát a water famine would ensue. The rains which had held off till late in August then came down just in time, and timely falls in November and December were so beneficial that at the close of the year famine relief operations were practically closed.

81. During the year 1902 there were 24,185 in and 87,025 out-patients treated in 92 famine relief camp and poor-house hospitals and 2,341 deaths. The maximum number of admissions (4,702) were in the month of August. The maximum number of deaths (329) in the month of March. The minimum number of admissions and deaths was of course in December, when only three poor-house hospitals were open.

82. The greatest number of deaths (1,860) occurred in Ahmedabad District, out of which 669 occurred in the Dhuliakote poor-house, which contained all through a large number of very feeble and emaciated inmates. 216 deaths occurred in the Panch Maháls; 112 in Bijápur; 61 in Kaira; 60 in Sholápur; 28 in Ahmednagar and 4 in Belgaum.

83. The chief mortality was due to dysentery and diarrhœa (1,049); 57 deaths were due to emaciation of these 14 occurred in the Dhuliakote poor-house; 403 were due to fever; only 2 deaths were due to plague; and 830 to other causes. There were no deaths either from cholera or small-pox.

84. There were in all 21 deaths due to starvation; of these 11 were reported from the Dhuliakote poor-house, 1 from Wáda Taláo relief camp in the Panch Maháls and one from Sidatpur relief camp in the collectorate of Ahmedabad; 3 occurred in the town of Godhra, 2 in the city of Ahmedabad, 1 in Broach town and 1 in each of the collectorates of Surat and Dhárwár.

85. Real sanitary progress has been at a standstill for some years past. One of the chief obstacles to progress, though by no means the only one, is stated to be the want of funds. Sanitary schemes for water-supply are drawn up with much care and trouble only in the end to be shelved, because the financial part is uncertain, as witness the schemes for Dhárwár and Belgaum. If Government desire progress in this direction, aid must be afforded not only by way of loan, but by giving a direct money contribution of part of the cost. It is a matter of regret that out of the 5½ lákhs specially granted by the Government of India in the year 1902, some part could not have been devoted to helping Municipalities in large sanitary works, and I trust the Government of India will be pleased to allow this in future grants.

86. Municipalities consider themselves so badly off that it is with difficulty they will entertain project for even a water-supply, and although it is a quite sound sanitary proposition that water-supply and sewerage should go hand in hand, if this happy combination is waited for, no progress will be made at all. In large towns nearly all sanitary progress depends upon adequate water-supply, and this should be supplied wherever possible, even at the risk of an increase of fever, but no house connections till sewerage is provided for. As regards sewerage my experience, though many say that it is not suitable for Indian towns, is that nothing but sewers on the latest English methods will adequately remove the night-soil, urine and dirty water from a large Indian town, to outside where, however it may be disposed of, it will cause less harm than if left (as a large part of it is sure to be when removal is done by hand labour) to be absorbed within the inhabited area.

87. The chief touring was in the Southern Marátha Country, which owing to the exigencies of famine, especially in Gujarát, had not been visited for some years past, and the following notes have been made :—

88. There are 16,011 population living usually in 2,197 houses, or more than 7 persons to a house, which shows overcrowding, but now owing to plague being present many are living outside municipal limits. The town has had for some years a good water-supply on which lately some money has been spent for necessary repairs, but apart from this the only sanitary work of importance for years past has been the filling up and levelling of a piece of reclaimed land which is being slowly proceeded with. The sewerage of the town, which should have been taken in hand long ago, has not been even commenced.

Thána.

There are 6 sets of public latrines numbering 80 seats. Three bhungies clean these. 822 private privies are cleaned by 20 bhungies or 42 privies to a bhungi, and as there are no filth carts, all is supposed to be carried in baskets to the creek and thrown there—a distance, in some cases, of over two miles.

There are 295 shallow cess-pits, the contents of which are removed in four carts also to the creek.

The markets are not properly finished or well arranged and do not yield the revenue they should do.

The slaughter-house near the market is in a filthy condition and should be moved further to the creek.

The chief want is good sewerage to wash out which the water of the tanks in the town could be utilized.

Also ten more bhungies are required, and for the privies furthest from the creek three filth carts of the Crawley pattern should be employed.

Where the night-soil and sullage water are discharged a proper platform which can be cleaned down should be erected.

89. Scarcely anything has been done for the past twenty years in this town in the way of sanitary improvement. The water-supply is still from two tanks and 313 wells in the town, liable to soakage. There is no sewerage and the drains are open surface ones, quite pervious, and the sullage water stagnates in these or in cesspools in the compounds where it is allowed to dry up.

Kalyán.

There are 4 sets of public latrines of 30 seats and 555 private privies with 15 bhungies to clean them (or 1 bhungi to 39 seats), and the soil is taken away in baskets to be thrown into the creek.

There is one vegetable market in the town not properly laid out or clean, and also a private market where meat, fish and vegetables are sold together.

There are twelve butchers and no slaughter-house.

Suggestions have been made before. It is little use repeating them, as I am informed the income of the Municipality will fall short of the expenditure, though there is no debt.

90. This town of 13,507 inhabitants suffered from a severe outbreak of plague at the close of last year, raising the mortality to 78·18 per thousand.

Wái.

The water-supply is from the river Krishna, the Kichkiora, three Municipal wells and some private wells in the town.

There is no drainage except road-side gutters dug out of the earth and cleaned twice a year.

There are 65 public latrine seats and 522 private privies, and to clean these there are 5 filth carts, of which only two, of 200 gallon capacity each, making two trips each daily, are in use, driven by two bhungies. Three bhungies attend on the public seats and 8 on the private privies, or an average of one bhungi to 65 private privies, and in my opinion the work of cleansing cannot be efficiently performed.

The filth is thrown on the ground without further attempt at treatment on a piece of land over a mile to the north of the town bordering on a nullah which discharges into the Krishna above the bathing places. When heavy rains fall there is little doubt the filth is swept into this nullah and carried away; what remains is disposed of by auction.

There are I am told, about eight miles of roads and lanes, and to clean these there are, 14 sweepers—not two to a mile, assisted by two rubbish carts of a capacity of about 35 cubic feet each, one of which is badly out of repair.

A properly delivered water-supply with a sewerage scheme to correspond is required. Two schemes of water-supply have been considered, each costing about Rs. 6,600, but owing to the expense and want of funds the matter has been dropped.

The bhungies on the private latrines should be 17 in number.

The carts in use are leaky and should be repaired, and all five carts should be put in use. Another night-soil depôt should be selected on this side of the nullah nearer the town, which seems to be the most suitable site, or two sites—one to north-east, and one to north-west, and the night-soil trenched properly.

There should be ten more street sweepers, as is clear the lanes are not swept daily. As it is probable that a good deal of *kutchra* is removed by the inhabitants themselves, the present two carts, if properly repaired, will suffice.

The Municipal members seem to take so little interest in sanitation that they do not trouble to look after the property they have. An inspection once a month of the carts, &c., belonging to the Municipality would soon show where repairs were wanted and they could be easily executed.

Another great point constantly urged, not only by this Municipality but by all others is want of funds. On looking, however, into the Administration Report of this Municipality for 1901-1902, the income from all sources is found to be Rs. 11,308 (including grants and contributions Rs. 1,899 and an advance from Government of Rs. 1,000), or less than a rupee per head a year. If the grants and advance are deducted the taxation is under ten annas per head per year.

There are 2,493 houses, and for purposes of taxation these are divided into 16 classes and in 1900-1901 this brought in Rs. 2,491 and in the following year much less—Rs. 1,557—owing, it is said, to the plague. Too many people appear to avoid paying house-tax, and all dwellings except temporary huts and tents should pay something.

Another source of income is the tax on private privies. This is levied according to the number of people stated to live in a house with a privy and the charge is three annas per person per year. The amount recovered was Rs. 308-14-0 in 1900-1901 and nearly Rs. 192 in 1901-1902—not a rupee a year per privy, and quite insufficient to pay the salary of the bhungies employed. The tax should be Rs. 3 a year for each privy seat.

It does not appear that the taxation here is heavy, and more could be raised not only to pay for the extra conservancy establishment required, but even to find enough to pay the interest and sinking fund on a loan for a water-supply.

91. Since my last visit to this station a charge for water taken from public wells has been established, and provision made for securing an adequate space around each bungalow that is to be built.

Panchgani.

Several more bungalows have been built since my last inspection, and more, I hear, are projected, but the water-supply and conservancy remain in the same condition. As the number of houses is increasing it is absolutely necessary to take steps about increasing the water-supply and putting the conservancy establishment on a proper footing.

The public water-supply is from the Dalkeith springs and two other wells on the opposite slope, and there are several private wells. The supply in the

hot weather when most needed is very scanty. As for the conservancy, there is one public latrine of eight seats, very foul, one filth cart of 50 gallons and three sweepers, and there are many complaints regarding the nuisances which exist. The population is stated to be 1,312, but is for most part of the year a great deal in excess of this. There are 67 bungalows and 190 native houses. As the Superintendent points out, there is no taxation and he cannot carry out sanitary improvements without funds, and suggests the formation of a Municipality which will enable money to be raised, for the amount at present is only sufficient to provide for the repair of wells and roads. The project to preserve and increase the supply of the Dalkeith springs has been put in the hands of the Public Works Department, but no start has yet been made.

Sátára.

92. A town of 22,113 inhabitants, at present suffering severely from plague, has its water-supply from three sources—the Mahudara Tank, the Yeoteshwar Tank and the Kas supply, all fairly distant from the town and fairly free from contamination. This water, however, is delivered into 136 open public cisterns (as well as drawn from 54 stand pipes) from which it can be dipped up and the water can be, and is fouled.

One of the Municipal want is stated to be a filter and settling tanks for the Kas water, but this will be waste of Municipal funds until the open dipping tanks are converted into closed cisterns with taps for drawing off the water. The system of drainage is to allow the waste and other sullage water to run by open or partially closed drains into the nearest water course, of which there are several.

Conservancy and Scavenging.—There are 30 public latrines with 160 seats for males and 151 for females, and about 1,475 private privies. To clean these there are 43 bhungies, or one for every 41 seats, 8 night-soil carts of 200 gallons capacity each (two of which leak), making one trip daily. The dry earth system is supposed to be in force, but what is done is the solid and semi-solid matter is emptied into a large barrel and from this transferred to the night-soil carts—a double removal which is most objectionable. Two sullage carts of 100 gallons each, making each two trips daily, remove the urine and other fouled water. Thirty miles of roads and lanes are cleaned by 15 sweepers (1 man to two miles), and the rubbish removed by 4 carts, each of 44 cubic capacity nearly, making four trips daily. So much of the night-soil, fouled water and rubbish as is removed is taken to a depôt to the north of the town and there disposed of, the night-soil being thrown into pits and covered with rubbish, the foul water being simply emptied on the ground.

The site of the depôt is satisfactory, but the mode of disposal could be improved.

The mutton market in which dried fish is also sold is of a very old pattern and dirty. The slaughter house is fair, but the catch-pit for the waste and fouled water is too small and the liquid overflows. This is also the case with catch-pits attached to the public latrines.

It is useless making any suggestions. The Civil Surgeon, who is also Chairman of the Sanitary Committee, accompanied me round and I pointed out what could be done at small expense to improve matters. Nothing in the way of sanitary improvement has been done since 1895, and now the expenditure on plague and the usual "No funds!" cry prevents any expenditure on sanitary improvement. Taking the year 1900-1901 taxation brought in Rs. 34,025, of which Rs. 21,618 were from octroi, or Rs. 1-8-9 per head per year including octroi, and annas 9 per head a year excluding octroi. There are 4,600 houses and huts, of which about 3,500 pay some tax and 1,100 do not, and with this tax is mixed up the conservancy cess, no taxes being laid on the private latrines. I consider no solid built house or hut should escape taxation, and there should be a separate bhungi cess, especially on the private latrines, the proceeds being devoted entirely to improving the system now in force. I am informed that the Municipality do not get the Annual Report of the Sanitary Commissioner and so are unable to refer back and see what sanitary improvements are required of them.

Dhárwár.

93. This is somewhat scattered Municipal area. The central town to the south-east has about 21,000 inhabitants and several villages running from the west along the north of the Fort contained in the Municipal area make up 10,000 of population more.

All these people are dependant for drinking water on wells and tanks. For the town people there are 2 tanks in the town supplied through an open channel by a reservoir tank, 8 Municipal wells and 16 private wells. For the suburbs there are two tanks, 6 Municipal and 15 private wells.

The water in the town gets scanty in the hot weather, and the water in most of the private wells is brackish, and this is not surprising, considering that there are 2,000 deep fœcal cess-pits and an average of eight people use one cess-pit daily.

There are road-side gutters, those in the main street pucka built.

There are 13 sets of public latrines of 62 seats which are not all in good order, 2 public urinals, 75 private surface privies and 2,000 deep fœcal cess-pits.

The cleansing staff and equipment consists of 13 bhangies, three night-soil carts in use with three bhangies to drive (two of these carts of 60 gallons each are of good pattern and the third is of 100 gallons cylindrical and leaks. Each makes two trips daily). Twenty-four men to clean gutters and fill and drive six sullage carts to a depôt (all the sullage carts are badly out of repair and useless for carrying liquid), 50 men to sweep the streets and 9 men with 9 rubbish carts to take the litter to the depôt (the rubbish carts are in good order).

The night-soil and rubish depôts should be properly laid out.

What is wanted here is first a good water-supply from outside. Some years ago a good scheme was worked out, but Government declined to sanction it in Government Resolution No. 245 of 15th January 1896, General Department.

Another scheme is now proposed to obtain water from wells sunk near the Distillery. There is sufficient water, but it must be tested again as to its potability. It appears as if the water was too hard, but if this is the only objection Clarke's softening process might be considered.

The bhangi staff needs increasing and the public latrines also. It is no use increasing the number of latrines unless they can be adequately cleaned. Allowing that the suburban population (10,000) used the fields, 16,000 people the cess-pits and 600 the 75 private privies, there are still over 4,400 people left in the town proper to use 13 sets of latrines or one set and one bhangi to 340 people (one seat to every 71 persons) and three filth carts to remove what is deposited. Public latrines should be built in sets of 20 to 30 seats with two filth carts and two bhangies, one to empty the pans constantly and one to drive away the full cart to the depôt. The deep fœcal cess-pits should be closed directly adequate public accommodation can be provided. A book of sanitary plans has been shown to the Municipality and they have been invited to get a copy.

Belgaum.

94. This town of 26,237 population is surrounded by Cantonments and Native States and has little room for expansion. Plague has visited it regularly and severely for the past five years, and it is not difficult to see why such has been the case, as between the main streets the houses and huts are crowded together in a most irregular fashion. The only remedy lies in taking block by block between wide streets, and rebuilding in straight lines on a proper plan.

The people are dependant for water on 2 tanks, 15 public wells and 2,000 private wells, many of which are brackish, and the supply in the hot weather is scanty, and both public and private wells in the town are liable to pollution.

The only drainage consists of unpaved road-side gutters.

Conservancy.—There are 1,780 private privies with 1,600 shallow cess-pits attached and eight blocks of public privies holding 98 seats. As the average population is 5 to a house the private privies serve for 8,900 persons, leaving one public seat for every 176 persons.

The staff consists of 3 Mukádams, 36 bhangies for the private privies or one man to every 49 seats; 30 bhangies for the public latrines, but these men have

also to drive the filth carts to the depôt, 4 men to take up the droppings in the streets and bye-lanes and one sullage cart is for taking the semi-solid matter from the cess-pits.

The streets are swept by 38 sweepers with ten rubbish carts and fairly done, but the rubbish, with which is unmistakably mixed a good deal of night-soil, is deposited in a pit in the town. The deposit is very offensive as well as being extremely insanitary.

As regards the water-supply an excellent project has been drawn up to supply both the Cantonment and the Town, and is now before Government.

As regards the removal of the night-soil, there should be 20 more bhangies for the private privies. As regards the public latrines the number of bhangies is sufficient for the present number of latrines, but the number of public latrines requires to be very much increased, and, of course, with them the number of bhangies. It is no use to increase the number of latrines unless adequate provision is made for their proper cleansing.

The number of filth carts is sufficient for the present, but half of the number should make two trips daily to the depôt.

The deposit of rubbish and garbage in the town behind the Mámlatdár's Katcheri should be stopped.

95. Fortunately the Municipal area is not crowded, and so plague has not taken hold of the town. Since the last report very little sanitary improvement has been effected, and there is no need to make any additions to the suggestions then made. The late rain has increased the water-supply and done away with any apprehension of scarcity.

Bijápur.

96. The Deputy Sanitary Commissioners have worked well, but the changes amongst them have in past years been and continue to be too frequent. In each of the Central, Southern and Gujarát Divisions three different officers held charge during the year, and it is difficult for work to be properly supervised with such frequent changes.

97. The office work has as usual, of late years, been arduous and has been well carried out. My Assistant, Mr. Keess, worked exceptionally hard, and I beg to bring his services to the notice of Government.

J. W. CLARKSON, Lieut.-Col., I. M. S.,
Sanitary Commissioner.

Bombay, 27th March 1903.

O. H. CHANNER, Lieut.-Col., I.M.S., M.B., D.P.H.,
Sanitary Commissioner.

Bombay, 2nd May 1903.

APPENDIX I.

ANNUAL REPORT OF THE SANITARY BOARD, BOMBAY PRESIDENCY, FOR 1902.

1. *Change in the constitution of the Sanitary Board.*—The number of the Members including the President was increased from three to five by the addition of the following officers :

The Chief Engineer, Public Works Department.

The Commissioner, Central Division.

2. *Poona Cantonment.*—The Sanitary Officer, Bombay Command, submitted proposals for the drainage of the Cantonments and these were considered by the Sanitary Engineer.

3. The Sanitray Board also reported on a proposal to prohibit irrigation in the neighbourhood of the Cavalry Lines at Ghorpuri as it was considered to injuriously affect the health of the troops.

4. *Poona Drainage Project.*—The City Municipality made certain proposals in connection with the revised project and these, it is understood, are now under the consideration of Government.

5. *Poona City Water-supply.*—The result of chemical analysis being favourable, the Sanitary Board recommended that the Municipality should, under certain conditions, be allowed to continue using water from the Katraj Tank and the proposals were favourably entertained by Government.

6. *Ahmedabad Water-supply.*—Owing to the abnormally low state of the river, it was found necessary to lower some of the pipes connecting the supply wells.

7. *Ahmedabad Drainage.*—The drainage works estimated to cost about eleven lacs of rupees were commenced, under the supervision of a Special Engineer, working under the orders of the Chief Engineer, Northern Division.

8. *Nadiad.*—A project for constructing a drain round the town to carry off flood water was examined and conditionally approved by the Sanitary Engineer.

9. *Hyderabad Sind Water-supply.*—A proposal to pump direct into the mains was conditionally approved of as a temporary measure by the Sanitary Engineer.

10. *Sukkur Water-supply.*—The Sanitary Engineer visited Sukkur and advised the Municipality regarding the steps necessary to improve the water-supply which had partially failed owing to a change in the course of the Indus.

11. *Pandharpur.*—In accordance with the instructions contained in Government Resolution, General Department, No. 4877 of 1901, the Board met at Pandharpur in February 1902 and submitted a report on the sanitary condition of the town. It is understood that a sanitary survey will shortly be carried out by the Executive Engineer, Sholápur.

12. *Manjri Experimental Sewage Farm.*—The experiments commenced in February 1902 and were continued throughout the year. The report on the working of this farm will be submitted by the Agricultural Department. The Septic Tank and bacteria beds worked satisfactorily and the crops irrigated by the effluent from the tank and by the filtrate from the bacteria beds were equally good. Arrangements were made in December for the daily analysis of the sewage.

13. *Miscellaneous*—The following plans and estimates were also reviewed by the Sanitary Board or Sanitary Engineer :—

(1) A report by Mr. John Wallace on the drainage of Bándra.
(2) Improving the drainage outside the Ahmedabad Jail.
(3) Proposed beef and mutton market at Matherán.
(4) Mortuary at Karjat.
(5) Latrines at Kotri.
(6) Water-closets for the Police Lines at Karáchi.
(7) Site for the proposed new Jail at Násik.

W. McCONAGHY, M.D., I. M. S., Surgeon-General with the Government of Bombay and President, Sanitary Board. } President.

JOHN TATE, M.Inst.C.E., Chief Engineer, Public Works Department.
O. H. CHANNER, Lieut.-Col., I. M. S., M.B., D.P.H., Sanitary Commissioner for the Government of Bombay.
A. D. YOUNGHUSBAND, Commissioner, Central Division.
D. W. HERBERT, A.M.I.C.E., Sanitary Engineer, Member and Secretary, Sanitary Board. } Members.

APPENDIX II.

No. 1034 of 1903.

ANNUAL REPORT OF THE HEALTH OFFICER OF THE PORT OF BOMBAY FOR THE YEAR ENDING 31ST DECEMBER 1902.

I.—SUMMARY.

The statement No. 1 which is appended to this report shows that 15,432 vessels of all sorts with 701,964 crew and passengers were examined during the year ending 31st December 1902, against 34,637 vessels with 886,310 crew and passengers who were inspected during the year preceding. The reduction in the numbers during the year under report was on account of the exemption from medical inspection of a large number of Native sailing craft, Shepherd's Ferry Steamers and other vessels which plied between the Port of Bombay and the ports on the Mainland bounded on the north by the Thána Creek and on the south by Nagothna and Roha as per Government Notifications No. 1697-P. of 17th April 1901 and No. 3963-P. of 30th September 1901.

2. From table No. 1 it will be seen that during the year under reference the clothing and bedding of 93,479 crew and passengers of outgoing and incoming vessels were disinfected. Of this number 79,338 were Native crew and third class or deck passengers who left the Port of Bombay for ports out of India; 8,359 were crew, prisoners-of-war and British troops who arrived by transports from Durban; 1,260 were passengers from East African Ports among whom cases of jigger were detected; 3,570 were pilgrims who returned from Mecca via Aden and other routes; and 952 were passengers who arrived by other infected vessels. The table further shows that 40 vessels on which cases of infectious diseases occurred were disinfected, and that 252 persons among whom cases of small-pox occurred were vaccinated. It also shows that at the outward and inward inspections and on board vessels lying in the harbour and docks, 44 cases of plague, 2 cases of cholera, 11 cases of small-pox, 106 cases of measles, 67 cases of chicken-pox, 30 cases of jigger, 3 cases of enteric fever and 1 case of scarlatina were detected. Chicken-pox is not one of the diseases declared by the Government of India as infectious under the Indian Ports Act, but Commanders of vessels do not, as a rule, undertake the risk of conveying persons suffering from it to other ports where it may be considered as an infectious disease.

II.—INCOMING VESSELS.

3. In accordance with the rules in force medical inspection and disinfection were imposed on vessels which were actually infected, or suspected to be infected, with plague, cholera, small-pox, measles, scarlatina, black leprosy or other infectious disease on or before arrival at Bombay. Inspection for jigger was compulsory in the case of all vessels from East African Ports. 98 vessels of various kinds with crews of 8,154 persons and 17,119 passengers were inspected on arrival here. Six of these vessels were hired transports which arrived from Durban with 8,359 Boer prisoners and Military details. Among the prisonsers, 94 cases of measles and 3 cases of enteric fever were detected. The disinfection of the transports and of the clothing and bedding belonging to the crews, prisoners and troops was carried out under the supervision of the Port Health Officer. 59 vessels arrived from jigger-infested ports. They landed 118 cases at intermediate ports and on arrival here had 30 cases of ulcers due to jigger and 1 case of small-pox. The patients were removed to the Goculdas Tejpal Hospital for treatment. These jigger-infested vessels as well as the clothing and bedding of their passengers, who numbered 1,260 in all, were disinfected. 21 vessels with 3,570 pilgrims arrived from Jeddah and had one case of small-pox. The clothing and bedding of the pilgrims were disinfected before they were made over to the Protector of Pilgrims for disposal. The remaining 5 vessels had on board 1 case of plague, 2 cases of small-pox, 7 cases of measles and 5 cases of chicken-pox. The vessels and the kit of the persons among whom the cases occurred were disinfected.

4. His Majesty's Ship *Pomone* arrived here with several cases of beri-beri, of whom 12 of the worst were sent to the St. George's Hospital. At the request of the Naval Authorities the Port Health Disinfection Barge was placed at their disposal for the disinfection of the linen and clothing and bedding belonging to the vessel and to all on board. The Health Officer has no power to deal with cases of beri-beri as it is not one of the diseases declared by the Government of India to be infectious under the Indian Ports Act.

5. The orders regarding the medical inspection of vessels arriving with horses from Australia have been cancelled, *vide* Government Resolution No. 6632 of 30th September 1902. Consequently no such ships were visited by the Port Health Staff after that date.

6. In accordance with Government Resolution No. 2939 of 28th May 1902 vessels arriving from East African Ports were inspected with a view to detect cases of sleeping sickness. Up to the present no case of that disease has been discovered here.

III.—Outgoing Vessels.

7. In accordance with the Medical Inspection Rules published under Government Notification No. 3892-P., dated the 14th June 1899, and Rule I issued under Government Notification No. 2671-P. of 30th September 1902, the medical examination of the crew and passengers of all vessels and the disinfection of the clothing and bedding of the Asiatic and African members of the crew, who were not officers, engineers, doctors, or Japanese, and of the deck, 3rd and 4th class passengers, and Asiatic and African servants bound for ports out of India were carried out immediately before they left the Port of Bombay. The inspection of the crew and passengers was done by day, on shore, in sheds specially arranged for that purpose. The disinfection was carried out at the Disinfection Shed which is situated on the Frere Road, near the Prince's Dock.

8. During the year under report, 15,313 outward bound vessels with 239,040 crew and 437,651 passengers were inspected. At the inspection 3,289 persons were rejected. 28 cases of plague, 7 cases of small-pox, 1 case of measles and 51 cases of chicken-pox were detected at the time of inspection.

9. Of the 15,313 outgoing vessels, 345 vessels with a crew of 34,067 persons and 32,177 passengers left for Aden or ports in the Red Sea and Europe; 608 vessels with 38,596 crew and 42,607 passengers for other ports out of India, and the remaining 14,360 vessels with 166,377 crew and 362,867 passengers for Indian Ports including Burma.

10. The clothing, bedding, boxes, and other suspected articles of 42,133 Asiatic and African members of the crew, and of 32,277 third and fourth class and deck passengers who sailed on steamers bound for ports out of India were disinfected at the place mentioned in paragraph 7 of this report. In addition to this disinfection the kits of 4,155 crew and 773 passengers who sailed in Native craft were also disinfected. Thus the total number of outward bound crew and passengers whose clothing, bedding, etc., were disinfected comes to 79,338 during the year under report against 70,914 during the year preceding.

11. The Disinfection Shed was fitted with another Equifex sterilizer so as to enable the staff to get through the disinfection of the kit of crew and passengers of several vessels sailing about the same hour. The fitting up of the extra stove saved some vessels some delay and inconvenience.

12. The Transport *Aurania* left this port for Durban on the 8th April 1902 with 1,582 Native followers. A certificate of disinfection of the kits belonging to the Native followers was produced by the Military Authorities. The certificate in question stated that "the kits of men at Camp Igatpuri have been disinfected by sulphur fumes" and was signed by a Military Officer and not by a Medical Officer.

As the disinfection of clothing and bedding by sulphur fumes is not recognised by the Venice Sanitary Convention and as it is not in accordance with the orders laid down in the Appendix to the Medical Inspection Rules framed under the Epidemic Diseases Act, arrangements were made with the Military Authorities for carrying out the disinfection of the clothing and bedding of all Native details by the Port Health Department.

13. In accordance with Government Resolution, General Department (Plague), No. 1210-P., dated the 7th April 1902, the clothing and bedding of 5,079 crew and passengers belonging to 51 vessels which proceeded to ports out of India *viâ* Karáchi were not disinfected at Bombay as the Agents preferred to have the disinfection done at Karáchi.

14. Two firemen on board the P. & O. S. S. *Arabia*, which left Bombay on 3rd May 1902, were caught by the Police Officer on duty receiving undisinfected kit from their wives who were in a tony alongside the vessel. The firemen were prosecuted for breach of Rule I of the Medical Inspection Rules and their wives were charged with abetment of the offence.

15. In the following instances the crew and passengers of vessels which called at this port merely to land or embark passengers were exempt from inspection and disinfection of their clothing and bedding in accordance with the proviso to Rule I of the Medical Inspection Regulations. Such of the crew and passengers as embarked at Bombay on the vessels were inspected, by day, on shore; the new Native crew and the third and fourth class and deck passengers had their effects disinfected:—

(*a*) The Steam Ship *Massilia* called at Bombay on 22nd February 1902 on her voyage to Calcutta *viâ* Colombo and landed a number of passengers and the majority of her Native crew who were paid off. 119 new crew were shipped.

(*b*) and (*c*) In April the Steam Ship *Oceanien* and in May the Steam Ship '*Yara*' called here on their voyage to Marseilles *viâ* Aden and embarked at Bombay 114 saloon and 71 third, fourth class and deck passengers.

(*d*) In May the Steam Ship *Malacca* called at Bombay on her voyage to China, merely to land troops. She did not embark any passengers at Bombay.

(*e*) In August the Steam Ship *Yarra*, which was in this port for a short time on her voyage from China to Aden and Marseilles, embarked 6 saloon and 12 third, fourth class and deck passengers.

16. The Portuguese Transport "Zaire" called in August under the proviso of Rule I of the Outward Inspection Rules. She left the Port without medical inspection and without a medical certificate.

17. In Government Notification No. 1377-P., dated 18th April 1902, the vessels of the Coast Guard Fleet were exempt from the rules prescribed in Government Notification No. 3892-P., dated the 14th June 1899, and from any other regulations made in exercise of the powers conferred on the Government of Bombay by the Epidemic Diseases Act of 1897 for the inspection, medical examination or disinfection of vessels and persons sailing therein.

18. The Bills of Health granted to 2,018 outgoing steamers during the year under report were foul as they showed deaths from plague which occurred in the city during the week previous to the departure of the vessels. The Bill of Health declared that the vessel sailed from the Port of Bombay in a satisfactory sanitary condition. The Agents, Commanders and Nacodas of all outward bound vessels, including Native sailing craft, with the exception of very few, were careful to carry out the instructions and advice of the Port Health Officer as regards keeping their ships in a sanitary state. The forecastles were limewashed, painted or disinfected before departure. As the 'tween decks and holds of almost all coal ships are used for the purposes of nature by the large number of coolies who are employed in discharging the coals, it was found necessary to have the decks and holds of such ships thoroughly washed down by the crew, and in many instances limewashed or disinfected, before they were granted a Bill of Health. 295 Native sailing craft for ports out of India were inspected during the year. At the time of inspection the bilges of the craft were generally found to be clean. Those that were found to be dirty or to contain foul water had to postpone their departures until thoroughly cleaned.

19. The Steam Ships *Onipenta, Vadala, Shahanoor, El Guisr, Somali* and Transports *Plassy, Bavarian, Aurania, Templemore* and *Mohawk* had cases of infectious diseases among their crew or passengers within 10 days prior to their departure from this Port. The Bills of Health granted to these vessels mentioned the illness which occurred on board and the measures taken before departure for the prevention of the spread of the disease.

20. Two vessels were allowed to convey to Europe coffins containing the remains of persons who were certified to have died of scarlet and remittent fevers. The coffin of the person said to have died of scarlet fever was carefully packed so as to avoid the possibility of conveying infection to other persons. The persons interested had the permission of the various Governments to convey the corpses to Europe.

IV.—Infectious Diseases on Vessels in the Harbour.

21. Between 1st January and 30th June 1902, 10 steamers and 11 Native sailing craft, which were lying in the docks and at the different Bandars in the harbour, had on board 10 cases of plague, of whom 8 died; 2 cases of cholera, both of which proved fatal; 4 cases of measles; 5 cases of chicken-pox; and 1 case of scarlatina. In addition to these cases 5 labourers were found dead in the Prince's and Victoria Docks and at Modi Bandar (Shepherd's Wharf). The deaths were reported to have occurred from plague. The disinfection of all these vessels and those referred to in paragraph 3 of this report, as well as of the places where the dead bodies were found, was thoroughly carried out in accordance with the regulations. There was no case of plague or other infectious disease on vessels which were at anchor in the harbour during the period extending from 1st July to 31st December 1902. A statement (No. 2) showing details of the cases referred to is appended to this report.

V.—Port Observation Camp.

22. The present area of land occupied by this camp is 12,555 square feet, the monthly rent for which amounts to Rs. 87-14-2. Among the passengers and crew who were sent to the Camp, 28 developed plague and were transferred to the various hospitals in the city for treatment. The sheds of the Camp in which the plague cases developed were thoroughly disinfected with Perchloride of Mercury and were kept unoccupied for some days. The thorough disinfection of all the sheds was carried out frequently with the standard solution of Perchloride of Mercury. One hospital assistant and one ayah were employed to look after the patients in the Camp. One of the Medical Officers was detailed in turn every month to supervise the general working of the Camp.

VI.—Disinfection of Ships and Infected Cargo.

23. During the year 61 vessels of all sorts were disinfected under the personal supervision of the Health Officer of the Port or of his staff. In certain instances the disinfection barge was placed at the disposal of the Naval and Royal Indian Marine authorities to carry out the disinfection of linen, mattresses, clothing and bedding belonging to Naval ships and transports.

24. A man was reported to have been found dead of plague on some bags of cotton seeds at the North Jetty Extension, Prince's Dock. 25 of the bags of seeds which were

supposed to have been in contact with the deceased were disinfected by saturated steam under pressure. The cotton seeds were not destroyed by the process of disinfection. 20 bags of bones on board a country craft infected by a case of plague were also disinfected.

25. The vessels on which cases of cholera occurred had the drinking water which was stored on board discharged into the sea. The water-tanks were thoroughly disinfected inside with Potassium Permanganate solution before they were refilled with a fresh supply of drinking water.

VII.—General Health of the Shipping.

26. During the year, 996 persons connected with the shipping were admitted into the various hospitals in the City. The Saint George's Hospital admitted 558 European patients, of whom 20 died, 495 were discharged, and 43 remained after 1st January 1903 under treatment. The Jamsetjee Jeejeebhoy Hospital admitted 171 Native patients, of whom 11 died, and the Goculdas Tejpal Hospital 267 Natives, of whom 18 died. The diseases for which the patients were admitted were small-pox, measles, continued enteric and remittent fevers, dysentery, beri-beri, syphilis, gonorrhœa, debility, rheumatism, bronchitis, diarrhœa, pneumonia, abscess, ulcers, etc.

27. The Coroner of Bombay held an inquest on the body of a lad who died from the effects of mephitic gas poisoning while engaged in cleaning the bilges of a ship, and on the bodies of two persons who died from accidents on board ships during the year.

VIII.—Red Sea Pilgrim Traffic.

A.—Outward Pilgrim Traffic.

28. Bombay was opened as a port of departure for pilgrims in accordance with Government Notification, General Department, No. 6051, dated the 5th November 1902. On receipt of this Notification steps were at once taken to clear the ground at Pir Pao and erect camps there. The Public Works Department had the first camp for 300 open on the 1st December 1902 and 285 pilgrims were taken into it on that date for segregation for 10 days and after their clothing and bedding had been disinfected at the Disinfection Shed on the Frere Road, near the Prince's Dock. Subsequently more pilgrims were found waiting in Bombay and advantage was taken of the offer of one of Mr. Essaji Tajbhoy's hulks free of rent. 341 pilgrims were segregated on this hulk for 10 days from the 3rd December. The second camp at Pir Pao for 420 pilgrims was ready on the 10th December, but pilgrims for it were not brought before 17th December, on which date 333 souls were admitted into it. As more pilgrims offered, and as the time for segregation was very short, some 22 tents (each of which was capable of accommodating 20 fighting men or 25 followers on service) were at once borrowed from the Arsenal, and 262 pilgrims were admitted into some of these tents on 22nd December.

29. The huts in the camp were constructed of bamboo poles and matting. The roofs of the huts were of double matting and had a layer of mud on the top to keep out the direct rays of the sun. The huts were divided into two compartments, each of which was 15 feet by 15 feet. Each camp was surrounded by a bamboo and matting fence and was complete in itself. It had Banniahs' shops and places for selling wood, meat, tea, sweetmeats, etc. There were separate latrines and washing places for males and females.

30. The hospitals and quarters for the Staff and Police were situated outside the camps.

31. Water was supplied from two wells situated outside the camps. The quality was good and an unlimited supply was given at first. Sea water for bathing, washing and latrine purposes was available in unlimited quantity. It was drawn from wells in the beach close by and was stored in iron tanks in the camps.

32. The sanitary arrangements were attended to by a staff of male and female sweepers, and the excreta was removed and emptied into the sea. None was allowed to soak into the ground as the camps may be used next year and there was also the risk of contaminating the drinking water in the wells.

33. The camps and grounds were constantly swept during occupation, and the huts were limewashed by the Public Works Department after being vacated by each batch of pilgrims.

34. The following numbers of pilgrims were disinfected, examined and sent into the camps on the dates specified :—

No.	To	Date.
285	Pir Pao Camp...	... 1st December.
341	Hulk ...	... 3rd „
333	Pir Pao Camp...	... 17th „
262	Do. ...	... 22nd „
1,221		

35. In addition to the above 1,221 pilgrims who were segregated for 10 days in Bombay, 83 pilgrims from the provincial camp at Peshawar were received on 15th December which made a grand total of 1,304 pilgrims who passed through the camps from 1st to 31st December 1902.

36. The following pilgrim ships left Bombay on the dates shewn :—

S. S. *Shahanoor* left with 709 pilgrims on 15th December 1902.
„ *Ahmadi* „ 577 „ 31st „
1,286

37. During segregation 2 pilgrims died of debility and old age.

38. Sovereigns at the rate of Rs. 15 each were issued to the pilgrims at considerable labour and some loss to those who issued them.

39. The Police Guard varied in strength from 14 to 23 and was furnished by the District Superintendent of Police, Thána District.

40. The camps were in charge of the Port Health Officer who had a resident staff of—

1 Assistant Surgeon.	1 Clerk.
1 Hospital Assistant.	2 Peons.
1 Ward boy.	16 Bhistees.
1 Ayah.	16 Sweepers.

41. All the coolies and boatmen employed in conveying the pilgrims and their kit to and from the Pir Pao Camps were medically inspected and had their clothing disinfected on each occasion before they commenced work.

42. When the numbers and the various races who were segregated in the camps during the season are taken into consideration, the demeanour of the pilgrims must be considered as very good. There was no crime of any kind.

43. The pilgrim ships which left Bombay for Jeddah had no cases of plague or any other infectious disease during the voyage.

44. As a full report of the pilgrim traffic for the whole season, *viz.*, from 1st December 1902 to 6th February 1903, was forwarded to Government under this Office No. 769 of 9th March 1903, it is unnecessary to enter into further details in this report.

B.—Inward Pilgrim Traffic.

45. A table (No. 3) is attached to this report showing the number of vessels which brought to Bombay 3,570 pilgrims from Mecca *viâ* Aden and other routes.

46. The S. S. *Vadala* arrived in this port on 7th February 1902, with a crew of 98 persons and 67 pilgrims, among whom there was one case of small-pox. The patient was removed to a hospital on shore. The clothing and bedding of the pilgrims were thoroughly disinfected by means of the floating disinfecting apparatus. The pilgrims among whom the case of small-pox occurred were vaccinated. The necessary steps for the disinfection of the S. S. *Vadala* and the kit of her crew were taken.

47. The other pilgrim vessels referred to in the statement had no sickness of an infectious nature among their crew or passengers.

48. The baggage of 3,570 returning pilgrims was disinfected in the Port Health Disinfection Stoves. Pilgrims whose homes were up-country or beyond the frontier were not allowed to enter the town, but were handed over to the Protector of Pilgrims so that they may be sent direct from the Disinfection Shed to their homes by rail.

IX.—Emigration Traffic.

49. This traffic has been suspended at this port since the year 1897, owing to the prevalence of plague in the City of Bombay.

X.—Sanitary State of the Harbour and Foreshore.

50. The sanitary state of the foreshore and of the various bandars, basins and docks has been reported as fairly satisfactory.

XI.—Cholera, Small-pox and Plague in the City.

51. The public mortuary returns show that 75 deaths from cholera, 288 deaths from small-pox and 13,820 deaths from plague occurred in the City.

52. Each individual who left this Port was subject to a rigorous and searching examination for the detection of any symptoms suspicious of plague. In addition to this examination the personal clothing and bedding of such crew and passengers as came under the disinfection rules were thoroughly disinfected. This strict examination and disinfection have become so well known that very few persons actually suffering from plague attempt to travel by sea, as they know they will not be allowed to sail and may be detained in the camp or hospital.

53. Due intimation of any cases of plague which were known to have developed among the crew and passengers who were prevented from sailing to ports out of India was

sent to Government in order that the information may be communicated by wire to the authorities at the next port for which the vessel was bound. When a plague case occurred among those who were rejected from vessels bound for Indian Ports the fact was made known by the Port Health Officer to the authorities at the next port where the vessel was to call. This procedure was adopted so that other ports may have full information of what had taken place and be in a position to protect themselves.

54. 44 cases of plague were detected at the outward and inward inspections and in vessels lying in the docks and harbour. This decrease in the number of cases detected is due to the fact that a great number of the rejected were turned into the town and were lost sight of, whereas in the years in which a large number of cases were detected, the persons who were rejected at the inspections were detained in the various camps which existed at the time until they showed clear signs of plague or until it was certain that the symptoms from which they suffered were not due to plague.

55. The S. S. *Tonkin*, which sailed from this port to Marseilles on the 5th June 1902, was allowed to convey to Europe a duly labelled parcel containing plague cultures which were secured in a tin of adequate strength, hermetically sealed and packed according to the Regulations. The parcel was addressed to the Scientific Laboratory at Lille.

56. An apparatus for the disinfection, by means of formaldehyde gas, of boots and shoes of crew and passengers of vessels has been supplied by the Director-in-Chief, Plague Research Laboratory. The machine is under trial.

XII.—Establishment.

57. In addition to the Port Health Officer and his permanent establishment, the following extra staff was employed to carry out the work of the Port Health Department during the year :—

(*a*) Staff for Medical Duties—
- 1 Commissioned Medical Officer,
- 4 English Doctors,
- 1 Lady Doctor,
- 1 Lady Nurse,
- 7 Medical Subordinates,
- 1 Medical Officer at Worli and Mahim Bandars.

(*b*) For the Observation Camp—
- 1 Medical Subordinate,
- 1 Ayah.

(*c*) For Disinfection Work—
- 1 Engine Driver,
- 1 Fireman,
- 2 Coolies.

(*d*) Office—
- 3 Temporary Clerks,
- 1 Naik.
- 1 Temporary Peon.

(*e*) Launch—
- 1 Tindal,
- 2 Lascars,
- 1 Engine Driver,
- 1 Stoker.

(*f*) Police—
- 1 Inspector,
- 6 Sub-Inspectors,
- 40 Native Sepoys.

When the inspection work became light during the monsoon months the Medical Staff and Police Force were reduced to—

(*a*) Medical Staff—
- 1 Commissioned Medical Officer,
- 2 English Doctors,
- 1 Lady Doctor,
- 1 Lady Nurse,
- 5 Medical Subordinates.

(*b*) Police Staff—
- 1 Inspector,
- 4 Sub-Inspectors,
- 25 Native Sepoys.

58. All the Medical Officers and Subordinates of the Port Health Department have carried out their respective duties, which were of a very onerous and unpleasant nature, with the same energy, tact and cheerfulness which they have hitherto displayed in the performance of the same.

59. The Port Health Office was very hard worked during the year and I am glad to report favourably on the satisfactory manner in which the members of the Office Staff under Mr. Ramrao G. Kamalakar carried out the work which fell upon them.

60. The Port Health Officer's thanks are due to the Customs Department and to the Dock and Harbour Police for their assistance and co-operation, also to the Agents of Steamship Lines for arranging matters for the Medical Staff in such a manner as to enable the latter to carry out the rules framed in accordance with the Venice Sanitary Convention with the least amount of inconvenience to crew and passengers.

J. CRIMMIN, V.C., Lieut.-Colonel, I. M. S.,
Health Officer of the Port.

Bombay Port Health Office,
Town Customs House, dated 14th April 1903.

TABLE No. 1.

The following tabular statement gives a summary of the Shipping of the Bombay Port and the work in connection therewith for the year ending 31st December 1902 :—

Vessels, including Country Craft.	Total Number of Vessels.	Number of Vessels inspected.	Number of Persons inspected, including crew on Vessels.	Number of Native crew and 3rd class or deck passengers disinfected during the year.	Number of vessels disinfected.	Number of Persons vaccinated.	Number of Persons segregated or rejected.	Diseases and Number of Cases of each.								
								Plague.	Cholera.	Small-pox.	Measles.	Chicken-pox.	Jiggar.	Leprosy.	Enteric Fever.	Scarlatina.
Entered	*35,508	98	25,273	14,141	40	253	71	1	...	4	101	5	30	...	3	...
Left...	*33,110	16,313	676,691	79,398	...	...	3,389	·28	...	7	1	51	...	...	...	...
In harbour during the year ...	*1,175	21	...	...	21	...	...	15	2	...	4	5	...	...	...	1
Total for 1902 ...	69,791	15,432	701,964	93,479	61	253	3,360	44	2	11	106	67	30	...	3	1
Total for 1901 ...	83,309	34,037	826,310	75,814	83	603	7,224	73	5	34	159	67	46	3	4	1

* These figures are supplied by the Customs Department and the Port Officer, Bombay.

TABLE No. 2.

The following table includes all Steamers, Square-rigged Vessels and Native Craft which became infected while lying in the Port of Bombay during the year 1902 :—

Months.	Number of Persons who were attacked with Plague at Bandars and in the Docks.		Total number of cases of infectious diseases in the Bombay Harbour.													
			Total Number of Infected Vessels.	Cholera.		Small-pox.		Measles.		Chicken-pox.		Plague.		Scarlatina.	
	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1902.															
January ...	3	3	3	...	...	...	...	1	...	2	...	4	4	...	...
February ...	1	1	7	...	...	...	...	1	...	2	...	5	5	...	...
March ...	1	1	7	...	...	...	...	1	...	1	...	6	5	...	...
April	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...
May	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...
June	...	...	1	...	2	...	...	...	...	...	...	...	...	1	...
July	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total for 1902 ...			21	2	2	...	...	4	...	5	...	15	14	1	...
Total for 1901 ...			38	5	5	4	...	3	...	12	...	19	14	...	...

TABLE No. 3.

Statement showing the number of Pilgrims who returned from Mecca *vid* Aden by Vessels during the year 1902 :—

Name of Ship.	Date of arrival.	Number of Crew.	Number of Passengers.	Number of Passengers other than Pilgrims	By what route the Pilgrims arrived.	Number of deaths during voyage.	Chief Cause of death.	Number of cases of infectious diseases on board.
S. S. Vadala	7th February 1902 ...	93	67	...	Boypore*	.....	.....	1 case of small-pox among the pilgrims.
S. S. Hooseinee ,, ...	7th March ,, ...	71	5	8	Jeddah	.....	.....	.....
S. S. Shahanoor	20th April ,, ...	108	1,010	...	Do.	16	Old age and general Debility.	.....
S. S. Akbar	Do. ,, ...	86	28	...	Do.	3	.....	.....
S. S. Naderi	6th May ,, ...	72	353	...	Do. *vid* Karáchi	.....	.....	.....
S. S. Pemba	8th May ,, ...	80	54	...	Do. *vid* Persian Gulf	.....	.....	.....
S. S. Hooseinee	26th May ,, ...	60	87	...	Do. *vid* Karáchi	.....	.....	.....
S. S. Simla	20th May ,, ...	88	95	256	Do. *vid* Karáchi...	.....	.....	.....
S. S. Shahanoor	4th June ,, ...	102	807	...	Do.	.....	.....	.....
S. S. Pachumba	5th June ,, ...	84	47	108	Karáchi and Persian Gulf	.....	.....	.....
S. S. Pemba	13th June ,, ...	70	58	101	Do. do.	.....	.....	.....
S. S. Naderi	14th June ,, ...	72	521	...	Jeddah and Aden	.....	.....	.....
S. S. Java	25th June ,, ...	70	200	...	Persian Gulf	.....	.....	.....
S. S. Assyria	4th July ,, ...	79	80	...	Karáchi	.....	.....	.....
S. S. Dwarka	7th July ,, ...	...	1	...	Do.	.....	.....	.....
S. S. Simla	11th July ,, ...	...	5	...	Do.	.....	.....	.....
S. S. Naseri	12th July ,, ...	61	40	44	Jeddah *vid* Aden	.....	.....	.....
S. S. Pemba	17th July ,, ...	89	59	39	Persian Gulf *vid* Karáchi	.....	.....	.....
S. S. Kilwa	24th July ,, ...	88	5	50	Karáchi	.....	.....	.....
S. S. Hooseinee	6th August ,, ...	71	...	15	Jeddah	.....	.....	.....
S. S. Hooseinee	21st November ,, ...	93	45	11	Aden and Jeddah	.....	.....	.....
	Total ...	1,555	3,570	632	.....	19	.....	1 case of small-pox.

* These pilgrims arrived from Boypore for conveyance to Jeddah *vid* Porebandar.

APPENDIX III.

GENERAL POPULATION AND VITAL STATISTIC.

ANNUAL FORM No. I.—*Showing the Births registered in the Districts of the Bombay Presidency during 1902.*

1	2	3			4			5			6	7	8	9		
No.	Districts.	POPULATION ACCORDING TO CENSUS OF 1901.			NUMBER OF BIRTHS REGISTERED.			RATIO OF BIRTHS PER 1,000 OF POPULATION.			Number of Males born to every 100 females born.	Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths over Births per 1,000 of Population.	MEAN RATIO OF BIRTHS PER 1,000 DURING PREVIOUS FIVE YEARS.		
		Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.				Male.	Female.	Total.
	Western Registration District.															
1	Kolaba	304,112	301,095	605,507	11,000	10,872	21,872	18·17	17·95	36·12	101·17	10·12	..	16·71	15·87	32·58
	Central Registration District.															
2	Ahmednagar	417,038	410,779	839,817	19,215	18,166	37,381	22·96	21·71	44·67	105·77	13·83	..	18·56	17·65	36·21
3	Poona	418,248	420,854	839,102	18,582	17,532	36,114	18·70	17·72	36·51	105·99	·10	..	15·38	14·39	29·77
4	Sholápur	362,569	358,018	720,587	13,220	12,402	25,622	18·35	17·21	35·56	106·59	..	2·09	15·83	15·10	30·93
5	Satára	568,764	577,266	1,146,030	20,169	19,016	39,185	17·60	16·59	34·19	106·06	..	17·84	15·26	14·28	29·54
6	Ratnágiri	547,499	559,376	1,107,875	18,290	17,341	35,637	15·67	14·84	30·51	105·51	11·74	..	14·71	13·81	28·52
	Southern Registration District.															
7	Belgaum	501,087	491,175	992,262	15,122	14,709	29,831	15·24	14·88	30·12	102·39	..	24·05	16·76	15·99	32·75
8	Dhárwár	560,567	552,045	1,112,612	17,534	16,684	34,218	15·76	14·99	30·75	105·09	..	27·31	17·98	17·39	35·37
9	Bijápur	367,097	367,403	735,500	12,236	12,203	24,439	16·64	16·59	33·23	100·27	8·39	..	16·16	15·53	31·69
10	Kánara	236,003	218,414	454,417	6,053	6,561	13,514	15·29	14·44	29·73	105·97	..	3·62	15·59	14·47	29·96
	Gujarát Registration District.															
11	Surat	317,709	319,173	636,882	13,500	12,839	26,339	21·20	20·16	41·36	105·15	..	1·41	17·85	17·01	34·86
12	Broach	149,594	142,225	291,729	6,458	6,111	12,569	22·14	20·95	43·09	105·68	..	6·07	17·97	17·13	35·10
13	Kaira	376,599	340,664	716,263	13,064	11,776	24,840	18·24	16·44	34·68	110·94	..	23·61	17·16	15·16	32·32
14	Panch Maháls ..	132,035	128,068	261,003	5,957	5,648	11,605	22·82	21·64	44·46	105·47	10·81	..	16·37	15·39	31·76
15	Ahmedabad	407,626	387,718	795,344	13,448	12,293	25,741	16·91	15·45	32·36	109·40	..	20·00	14·81	13·42	28·23
	Sind Registration District.															
16	Karáchi	246,241	196,509	442,750	5,916	5,066	10,982	13·36	11·44	24·80	116·78	..	6·95	12·88	10·86	23·73
17	Hyderabad	543,051	444,524	988,475	11,580	8,475	20,055	11·72	8·57	20·29	136·64	..	2·83	10·40	8·37	18·77
18	Thar and Párkar ..	202,707	161,162	363,869	3,459	2,559	6,018	9·51	7·03	16·54	135·17	..	4·00	10·82	8·54	19·36
19	Lárkhána	354,103	301,980	656,083	9,161	7,545	16,706	13·96	11·50	25·46	121·42	..	1·29	16·30	13·71	30·01
20	Sukkur	291,592	241,327	532,919	7,667	6,198	13,865	14·66	11·85	26·51	123·70	6·29	..	15·37	12·75	28·12
21	Upper Sind Frontier ..	130,838	102,147	231,985	2,809	2,159	4,968	12·11	9·31	21·42	130·11	3·75	..	15·52	12·11	27·63
	• Total for the Presidency ..	9,529,472	8,951,890	18,481,362	327,549	303,844	631,393	17·72	16·44	34·16	107·80	..	4·88	15·89	14·68	30·57

ANNUAL FORM NO. II.—*Statement of* BIRTHS *and* DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY, *during the year 1902.*

1	2	3	4	5			6		7			8
Serial Number.	Districts.	Area in square miles.	Average population per square mile.	Population Census of 1901.			Births.		Number of Deaths registered.			Number of Deaths of males to every 100 Deaths of females.
				Male.	Female.	Total.	Total Number.	Birth-rate per 1,000 of population.	Male.	Female.	Total.	
	Western Registration District.											
1	Khándesh	10,041	1,420·	721,565	705,240	1,426,805	75,526	52·	34,249	33,010	67,259	103·
2	Násik...	5,850	135·	412,647	402,702	815,349	35,847	43·	18,607	17,117	35,724	108·
3	Thána...	3,573	226·	421,931	388,901	810,832	31,082	38·	11,610	10,383	21,993	111·
4	City of Bombay	22	34,567·	469,240	291,235	760,475	17,377	22·	27,563	20,444	48,007	134·
5	Kolába	2,131	264·	304,412	301,095	605,507	21,872	36·	8,192	7,552	15,744	108·
	Central Registration District.											
6	Ahmednagar...	6,586	127·	417,038	419,779	836,817	37,384	44·	13,332	12,478	25,810	107·
7	Poona...	5,349	185·	498,248	490,854	989,102	37,114	36·	18,244	17,780	36,024	103·
8	Sholápur	4,541	159·	362,569	358,018	720,587	25,622	35·	13,610	13,516	27,126	100·
9	Sátára...	4,825	238·	568,764	577,266	1,146,030	39,185	34·	28,273	31,352	59,625	90·
10	Ratnágiri	3,998	292·	547,499	620,376	1,167,875	35,637	30·	11,144	10,779	21,923	103·
	Southern Registration District.											
11	Belgaum	4,649	213·	501,087	491,175	992,262	29,891	30·	26,514	27,239	53,753	97·
12	Dhárwár	4,602	241·	560,567	552,045	1,112,612	34,318	30·	32,413	32,192	64,605	101·
13	Bijápur	5,669	129·	367,997	361,403	735,400	24,439	33·	9,376	8,893	18,269	105·
14	Kánara	3,945	115·	236,003	218,414	454,417	13,514	29·	7,836	7,322	15,158	107·
	Gujarát Registration District.											
15	Surat	1,653	385·	317,709	319,173	636,882	26,339	41·	13,379	13,668	27,047	98·
16	Broach	1,467	198·	148,504	143,225	291,729	12,569	43·	7,166	7,437	14,603	96·
17	Kaira	1,595	449·	375,599	340,654	716,253	24,840	34·	20,794	20,957	41,751	99·
18	Panch Mahális	1,606	162·	132,035	128,968	261,003	11,605	44·	4,328	4,456	8,784	97·
19	Ahmedabad	3,816	208·	407,626	387,718	795,344	25,741	32·	21,536	20,110	41,646	107·
	Sind Registration District.											
20	Karáchi	11,971	36·	246,241	196,509	442,750	10,982	24·	7,751	6,307	14,058	122·
21	Hyderabad	8,291	119·	543,951	444,524	988,475	20,055	20·	12,679	10,173	22,852	124·
22	Thar and Párkar	13,690	26·	202,707	161,162	363,869	6,018	16·	4,061	3,412	7,473	119·
23	Lárkhána	5,050	128·	354,103	301,980	656,083	16,716	25·	9,082	8,473	17,555	107·
24	Sukkur	5,398	96·	281,592	241,327	522,919	13,865	26·	5,573	5,003	10,576	111·
25	Upper Sind Frontier ...	2,621	88·	129,838	102,147	231,985	4,968	21·	2,179	1,918	4,097	113·
	Total for the Presidency...	122,984	150·	9,529,472	8,951,890	18,481,362	631,393	34·	369,491	351,971	721,462	104·

1	2	9										10		
Serial Number.	Districts.	Deaths per 1,000 of Population from										Mean Ratio of deaths per 1,000 during previous five years.		
		Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	Other causes.	All causes.					
										Male.	Female.	Total.	Male.	Female.	Total.
	Western Registration District.														
1	Khándesh	·01	·22	17·53	13·56	8·12	3·10	·31	4·24	47·46	46·80	47·14	48·72	45·29	47·04
2	Násik	...	·08	11·90	14·61	5·99	3·48	·35	7·40	45·09	42·50	43·81	50·67	46·64	48·69
3	Thána	...	·01	2·35	14·95	1·51	1·05	·61	6·64	28·46	26·70	27·12	42·03	40·2 2	41·14
4	City of Bombay	·09	·38	18·13	6·29	4·74	9·48	·94	23·07	58·74	70·20	63·13	68·56	82·13	73·60
5	Kolába	...	·03	1·23	14·09	2·40	·88	·40	6·97	26·91	25·08	26·00	36·62	34·32	35·20
	Central Registration District.														
6	Ahmednagar	...	·02	1·29	9·85	5·45	4·48	·27	9·48	31·97	29·72	30·84	40·11	36·58	38·56
7	Poona...	·01	·03	8·89	12·81	5·91	3·23	·40	5·14	36·61	36·22	36·42	43·77	41·26	42·54
8	Sholápur	...	·03	8·36	13·63	6·37	2·14	·40	6·71	37·54	37·76	37·64	38·66	35·37	37·10
9	Sátára	...	...	29·37	9·96	3·87	1·07	·31	7·45	49·71	54·31	52·03	41·17	39·24	40·21
10	Ratnágiri	...	·04	·36	7·84	2·83	2·60	·41	4·69	20·35	17·37	18·77	27·71	23·86	25·65
	Southern Registration District.														
11	Belgaum	...	·07	27·42	6·55	3·98	3·16	·37	12·62	52·91	55·46	54·17	49·40	47·90	48·66
12	Dhárwár	...	·25	29·38	10·64	1·74	2·54	·33	13·19	57·82	58·31	58·07	49·80	48·77	49·29
13	Bijápur	...	·04	2·05	9·14	2·64	2·07	·32	8·57	25·48	24·20	24·84	3:·38	30·04	30·71
14	Kánara	·06	1·32	1·71	15·44	1·39	·73	·32	12·39	33·20	33·52	33·36	32·12	31·27	31·70
	Gujarát Registration District.														
15	Surat	...	·05	7·07	18·69	·88	10·05	·36	5·37	42·11	42·82	42·47	46·17	44·09	45·12
16	Broach	·01	...	6·44	26·05	1·00	8·93	·45	7·17	48·25	51·93	50·05	66·83	66·35	66·59
17	Kaira	·01	...	11·71	20·60	1·95	10·81	·58	12·63	55·36	61·52	58·29	59·77	56·63	58·30
18	Panch Mahális	...	...	7·87	20·33	·60	·97	·47	8·41	32·78	34·55	33·65	80·78	72·23	76·65
19	Ahmedabad	·01	...	1·05	39·59	1·87	4·79	·32	4·82	52·83	51·87	52·36	64·35	61·43	62·94
	Sind Registration District.														
20	Karáchi	4·47	·17	4·78	13·97	·77	1·97	·09	4·63	31·48	32·09	31·75	34·34	32·31	33·44
21	Hyderabad	1·00	·06	1·61	17·35	·30	1·09	·30	1·41	23·39	22·89	23·12	18·33	17·55	18·00
22	Thar and Párkar	·03	·02	...	19·75	·04	·01	·26	·43	20·03	21·17	20·54	27·95	28·09	27·30
23	Lárkhána	...	·15	·01	25·19	·04	·03	·34	1·01	25·64	28·05	26·76	23·43	24·94	24·13
24	Sukkur	·02	·17	·01	17·08	·25	·47	·25	1·07	19·73	20·73	20·22	21·63	22·65	22·10
25	Upper Sind Frontier ...	...	·13	...	16·54	·12	·02	·27	·58	16·78	18·78	17·66	18·56	19·99	19·19
	Total for the Presidency...	·17	·12	10·00	14·66	3·18	3·21	·40	7·30	38·77	39·32	39·04	43·37	41·73	42·40

ANNUAL FORM No. III.—DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the month of the year 1902.*

1	2	3												4	5
No.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Total Deaths registered during the year.	No.
	Western Registration District.														
1	Khándesh	3,868	6,419	6,946	4,552	2,468	2,181	2,315	3,784	3,787	9,169	7,064	9,106	67,259	1
2	Násik	2,262	2,024	2,337	2,071	1,686	1,626	1,975	3,319	4,936	4,031	4,226	5,231	35,724	2
3	Thána	1,880	1,796	1,836	1,691	1,427	1,495	1,459	1,901	2,143	1,863	2,194	2,310	21,993	3
4	City of Bombay	4,371	6,029	7,640	5,866	3,561	2,450	2,716	2,845	2,985	3,284	3,043	3,217	48,007	4
5	Kolába	1,437	1,212	1,292	1,125	966	1,047	1,223	1,538	1,617	1,238	1,430	1,589	15,744	5
	Central Registration District.														
6	Ahmednagar	1,698	1,554	1,803	2,038	1,879	1,726	2,144	2,308	2,301	2,360	2,861	3,138	25,810	6
7	Poona	3,764	2,551	2,336	1,996	1,850	1,742	2,198	2,904	3,540	3,757	4,438	4,943	36,024	7
8	Sholápur	1,645	2,018	1,904	1,706	1,690	1,160	1,670	2,046	2,441	2,716	3,568	4,577	27,136	8
9	Sátára	5,392	4,727	4,247	2,392	1,952	1,870	3,446	6,214	8,451	7,509	6,372	7,053	59,625	9
10	Ratnágiri	2,169	1,865	1,797	1,732	1,661	1,597	1,828	1,893	1,959	1,713	1,906	1,803	21,923	10
	Southern Registration District.														
11	Belgaum	5,621	4,368	3,537	2,565	2,211	2,280	2,935	4,327	5,599	7,187	6,373	6,750	53,753	11
12	Dhárwár	6,650	5,183	3,617	2,646	2,296	2,547	3,512	5,430	6,862	8,848	8,391	8,623	64,605	12
13	Bijápur	1,278	1,167	1,188	1,310	1,428	1,165	1,526	1,562	1,526	1,699	2,078	2,341	18,269	13
14	Kánara	1,749	1,422	1,353	1,097	946	1,025	1,257	1,141	1,320	1,251	1,271	1,326	15,158	14
	Gujarát Registration District.														
15	Surat	1,889	1,957	2,523	1,793	1,313	1,268	1,738	2,184	2,410	3,811	3,305	3,856	27,047	15
16	Broach	1,815	2,042	2,015	1,014	651	571	723	777	805	1,135	1,593	1,462	14,603	16
17	Kaira	3,726	4,852	7,125	3,281	1,631	1,384	1,576	1,977	2,433	4,061	5,235	4,470	41,751	17
18	Panch Mahális	745	889	902	683	486	460	434	486	528	1,157	1,164	850	8,784	18
19	Ahmedabad...	3,939	4,029	4,425	3,027	2,156	1,719	1,867	2,496	2,740	4,215	5,856	5,177	41,646	19
	Sind Registration District.														
20	Karáchi	1,125	1,063	1,194	1,245	1,348	1,576	1,879	812	658	866	1,083	1,204	14,053	20
21	Hyderabad	2,543	2,354	3,068	2,076	1,260	1,216	2,054	1,373	1,300	1,561	1,994	2,053	22,852	21
22	Thar and Párkar	1,020	825	831	625	493	356	404	277	330	559	841	912	7,473	22
23	Lárkhána	2,352	1,448	1,526	1,331	1,287	1,052	1,022	892	1,054	1,601	2,203	1,787	17,555	23
24	Sukkur	1,319	1,032	976	907	893	677	647	595	661	917	1,141	811	10,576	24
25	Upper Sind Frontier ...	403	361	341	322	287	272	259	194	281	408	558	411	4,047	25
	Total for the Presidency.	64,660	63,192	66,757	49,091	37,856	34,462	42,807	53,276	67,667	75,916	80,773	85,085	721,462	
	Ratio of deaths per 1,000 in each month... ...	3·50	3·42	3·61	2·65	2·05	1·87	2·32	2·88	3·66	4·11	4·37	4·60	39·04	

ANNUAL FORM No. IV.—DEATHS *registered according to* AGE *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1902.*

1	2	3		4		5		6		7		8		9		10		11		12		13
No.	Districts.	Under 1 year.		1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.		20 and under 30.		30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		No.
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
	Western Registration District.																					
1	Khándesh	7,177	6,150	3,412	3,526	2,175	2,569	2,492	2,848	1,698	2,001	4,154	4,160	4,006	3,376	3,144	2,351	2,543	2,065	3,448	3,964	1
2	Násik	4,008	3,346	2,244	2,217	1,191	1,332	1,181	1,175	876	889	2,001	1,955	2,103	1,707	1,680	1,260	1,478	1,165	1,845	2,011	2
3	Thána	2,314	1,952	1,462	1,546	724	757	504	469	517	503	1,263	1,304	1,441	1,129	1,241	772	1,021	789	1,121	1,162	3
4	City of Bombay	5,116	4,368	1,917	1,944	1,215	1,354	1,561	1,333	2,509	2,027	6,160	3,634	3,638	1,853	2,134	1,152	1,633	1,150	1,683	1,629	4
5	Kolába	1,720	1,468	1,101	1,135	470	488	246	250	233	258	651	706	803	759	899	565	839	594	1,230	1,375	5
	Central Registration District.																					
6	Ahmednagar	4,400	3,430	1,793	1,786	659	692	388	410	370	442	838	990	1,053	1,062	861	693	970	760	2,000	2,218	6
7	Poona	3,969	3,271	2,478	2,373	1,179	1,226	956	1,107	681	818	1,637	1,957	1,867	1,748	1,575	1,319	1,472	1,161	2,430	2,899	7
8	Sholápur	2,930	2,375	1,886	1,846	898	956	708	729	530	621	1,121	1,315	1,257	1,221	1,172	1,116	1,188	1,064	1,920	2,273	8
9	Sátára	3,212	2,893	3,144	3,189	2,945	3,363	2,604	2,775	1,850	2,262	3,357	4,222	3,041	3,571	2,670	2,850	2,573	2,610	2,877	3,617	9
10	Ratnágiri	1,755	1,481	1,196	1,124	563	597	389	339	351	395	1,048	1,119	946	839	1,021	787	1,094	851	2,781	3,247	10
	Southern Registration District.																					
11	Belgaum	2,145	1,857	2,944	3,221	2,306	3,056	2,752	2,931	1,317	1,257	2,920	3,195	3,404	3,256	2,900	2,570	2,271	2,017	3,057	3,879	11
12	Dhárwár	2,939	2,505	3,476	3,528	3,281	3,519	3,399	3,484	1,714	1,703	3,035	3,870	4,009	3,768	3,579	3,016	3,039	2,714	3,342	4,085	12
13	Bijápur	1,698	1,397	1,713	1,734	640	670	363	406	209	253	583	618	773	659	931	647	890	665	1,596	1,844	13
14	Kánara	1,474	1,295	759	923	271	345	265	233	300	353	913	945	1,040	884	1,040	607	859	598	915	1,133	14
	Gujarát Registration District.																					
15	Surat	2,397	2,232	1,357	1,426	895	959	796	830	663	675	1,455	1,704	1,471	1,524	1,315	1,152	1,105	994	1,865	2,172	15
16	Broach	1,813	1,776	762	833	346	381	359	340	275	270	737	841	891	907	756	678	614	586	613	825	16
17	Kaira	3,516	3,575	1,952	1,630	1,054	1,064	1,177	1,102	1,075	888	2,814	2,690	2,916	2,927	2,459	2,375	2,070	1,907	1,762	2,710	17
18	Panch Mahális	966	906	344	313	308	380	257	261	229	230	595	643	605	629	452	390	352	310	229	304	18
19	Ahmedabad...	4,269	3,872	2,423	2,318	996	893	1,006	897	1,017	735	2,717	2,295	2,969	2,619	2,539	2,247	1,994	1,960	1,667	2,274	19
	Sind Registration District.																					
20	Karáchi	1,443	1,191	659	659	574	542	466	374	392	380	1,145	977	1,094	749	728	479	512	331	738	625	20
21	Hyderabad	1,949	1,849	1,275	1,179	740	719	608	394	629	488	1,498	1,422	1,761	1,286	1,526	1,013	1,167	646	1,527	1,184	21
22	Thar and Párkar	656	664	322	334	255	242	182	151	171	156	457	405	516	400	538	374	416	248	518	425	22
23	Lárkhána	2,097	2,050	1,432	1,378	518	528	252	203	210	235	690	872	913	847	881	637	734	513	1,300	1,181	23
24	Sukkur	1,538	1,419	817	714	281	256	146	146	173	194	457	537	525	482	499	361	429	271	778	644	24
25	Upper Sind Frontier ...	614	529	383	418	160	150	77	56	64	66	135	162	161	152	179	120	153	81	253	198	25
	Total for the Presidency.	66,115	57,842	41,251	41,294	25,144	26,988	23,114	23,243	18,044	18,129	42,981	42,542	43,145	38,423	30,717	29,536	31,466	26,144	41,514	[illegible]	
	Ratios per 1,000 living ...	318·47	286·11	44·79	43·90	19·70	20·98	18·71	23·21	23·14	26·01	26·53	26·35	29·05	28·96	37·83	32·65	55·20	48·07	108·81	1 7·5·	

ANNUAL FORM No. V.—DEATHS *registered according to* CLASSES

1	2	3					
		POPULATION ACCORDING TO CENSUS OF 1901.					
No.	Districts.	Mahomedans.	Hindus.	Christians.	Pársis.	Other Classes.	Total.
	Western Registration District.						
1	Khándesh	119,179	1,294,407	821	662	11,736	1,426,805
2	Násik	43,856	769,114	1,780	467	132	815,349
3	Thána	36,257	726,902	42,106	5,238	329	810,832
4	City of Bombay	155,747	522,856	29,645	46,231	5,996	760,475
5	Kolába	29,339	572,367	1,202	311	2,288	605,507
	Central Registration District.						
6	Ahmednagar	43,761	772,781	19,986	202	87	836,817
7	Poona	45,790	931,588	8,256	2,342	1,126	989,102
8	Sholápur	54,510	664,144	1,555	360	18	720,587
9	Sátára	40,888	1,103,881	975	230	56	1,146,030
10	Ratnágiri	82,825	1,080,073	4,929	29	19	1,167,875
	Southern Registration District.						
11	Belgaum	78,389	908,396	5,366	106	5	992,262
12	Dhárwár	141,528	966,767	4,046	153	118	1,112,612
13	Bijápur	84,416	650,089	866	29	...	735,400
14	Kánara	29,302	408,962	16,126	16	11	454,417
	Gujarát Registration District.						
15	Surat	54,191	562,812	957	12,516	6,406	636,882
16	Broach	63,408	199,176	685	3,127	25,333	291,729
17	Kaira	68,187	622,615	25,131	209	111	716,253
18	Panch Maháls	21,349	212,197	489	130	26,838	261,003
19	Ahmedabad	87,183	703,552	2,827	1,323	459	795,344
	Sind Registration District.						
20	Karáchi	344,516	93,209	2,650	1,841	534	442,750
21	Hyderabad	744,632	242,811	192	89	751	988,475
22	Thar and Párkar	211,309	152,383	5	4	168	363,869
23	Lárkhána	557,651	97,687	115	2	628	656,083
24	Sukkur	379,189	143,299	24	64	343	522,919
25	Upper Sind Frontier	209,192	22,784	2	...	7	231,985
	Total for the Presidency ...	3,726,594	14,424,852	170,736	75,681	83,499	18,481,362

Hindus include Hindus of all castes and Jains. Other

in the DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1902.*

4						5					
NUMBER OF DEATHS REGISTERED.						RATIO OF DEATHS PER 1,000 OF POPULATION.					
Mahomedans.	Hindus.	Christians.	Pársis.	Other Classes.	Total.	Mahomedans.	Hindus.	Christians.	Pársis.	Other Classes.	Total.
5,116	62,027	13	5	98	67,259	42·93	47·92	15·83	7·55	8·35	47·14
3,533	32,111	65	5	5	35,724	80·68	41·75	36·52	10·70	37·88	43·81
1,129	19,605	1,167	80	12	21,993	31·14	26·97	27·71	15·27	36·47	27·12
10,245	34,716	1,405	1,405	236	48,007	65·78	66·40	47·39	30·39	39·36	63·13
748	14,916	21	1	58	15,744	25·50	26·06	17·47	3·21	25·35	26·00
1,571	24,047	96	5	91	25,810	35·90	31·12	4·80	24·75	1,045·97	30·84
1,970	33,220	301	38	495	36,024	43·02	35·66	36·46	16·23	439·61	36·42
2,194	24,900	26	3	3	27,126	40·25	37·49	16·72	8·33	166·66	37·64
2,092	57,402	10	3	118	59,625	51·16	52·00	10·26	13·04	2,107·14	52·03
1,695	20,187	39	...	2	21,923	20·46	18·69	7·91	...	105·26	18·77
4,198	49,259	285	2	9	53,753	53·54	54·23	53·11	18·87	1,800·00	54·17
7,743	56,713	119	3	27	64,605	54·71	58·66	29·41	19·60	228·81	58·07
2,000	16,248	10	...	11	18,269	23·69	24·99	11·55	...	...	24·84
718	14,004	435	...	1	15,158	24·50	31·24	26·98	...	90·90	33·36
2,298	24,350	54	344	1	27,047	42·41	43·26	56·43	27·48	0·16	42·47
2,906	11,593	4	99	1	14,603	45·83	58·20	5·84	31·66	0·04	50·05
3,960	37,652	139	...	...	41,751	58·08	60·47	5·53	...	...	58·29
1,570	7,206	7	1	...	8,784	73·54	33·96	14·31	7·69	...	33·65
4,233	37,340	43	22	8	41,646	48·55	53·07	15·21	16·63	17·43	52·36
8,789	5,027	65	46	131	14,058	25·51	53·93	24·53	24·99	241·57	31·75
14,456	8,318	5	3	70	22,852	19·41	34·26	26·04	33·71	93·21	23·12
4,063	2,862	1	...	547	7,473	19·23	18·78	200 00	...	3,250·00	20·54
14,613	2,931	3	...	8	17,555	26·20	30·00	26·09	...	12·74	26·76
6,680	3,827	7	1	61	10,576	17·61	26·70	291·67	15·62	177·84	20·22
3,410	677	1	...	9	4,097	16·30	29·71	500·00	...	1,285·71	17·66
111,935	601,138	4,321	2,066	2,002	721,462	30·04	41·68	25·31	27·30	23·98	39·04

castes include *Buddhists, Sikhs,* Jews and all others.

ANNUAL FORM No. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the*

1	2	3	4	5	6	7	8	9	10		
									Inju		
No.	Districts and Towns.	Population according to Census of 1901.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Suicide.		Wounding or Accident.
									Male.	Female.	
	A.—DISTRICTS.										
	Western Registration District.										
1	Khándesh	1,360,369	15	307	20,091	18,638	11,195	3,991	10	11	280
2	Násik	771,184	1	55	6,608	11,056	4,432	2,475	8	7	187
3	Thána	784,673	3	11	1,540	11,840	1,104	750	30	23	272
4	Kolába	581,621	1	20	478	8,407	1,348	493	4	4	175
	Central Registration District.										
5	Ahmednagar ...	781,862	...	19	291	7,734	4,145	3,081	3	5	183
6	Poona	821,538	...	20	5,547	11,551	4,167	2,294	...	3	295
7	Sholápur	589,042	...	21	3,454	7,885	3,344	1,025	5	2	179
8	Sátára	1,095,049	...	...	31,825	11,212	4,162	1,063	4	1	290
9	Ratnágiri	1,132,815	...	47	306	8,896	3,149	2,949	5	4	239
	Southern Registration District.										
10	Belgaum	936,131	...	71	24,459	6,250	3,668	2,962	20	39	246
11	Dhárwár	976,302	...	208	29,032	11,054	1,682	2,397	19	27	200
12	Bijápur	706,674	...	30	1,491	6,627	1,844	1,391	26	15	158
13	Kánara	426,825	26	543	773	6,849	597	308	7	8	101
	Gujarát Registration District.										
14	Surat	504,854	...	8	2,949	9,664	156	3,782	11	7	145
15	Broach	238,686	3	...	1,749	7,026	141	1,584	1	3	75
16	Kaira	646,099	10	...	7,132	13,497	1,170	6,720	13	11	294
17	Panch Mahals ...	226,115	...	...	567	4,620	115	198	2	2	67
18	Ahmedabad ...	571,357	4	...	826	22,571	1,040	1,410	1	16	125
	Sind Registration District.										
19	Karáchi	329,850	1,627	29	83	4,188	70	58	1	1	313
20	Hyderabad... ...	919,652	911	56	571	15,795	125	223	9	11	130
21	Thar and Párkar ...	358,970	10	8	...	6,877	12	3	4	3	35
22	Lárkhána	641,540	...	94	2	15,897	21	12	3	5	134
23	Sukkur	442,538	11	19	4	7,239	69	84	3	1	69
24	Upper Sind Frontier.	221,258	...	22	...	3,511	15	5	1	4	40
	Total of Districts ...	16,065,004	2,622	1,588	139,778	238,884	47,771	39,258	190	213	4,232
	B.—TOWNS.										
	Khándesh District.										
1	Dhulia	24,726	...	3	2,644	241	168	208	...	...	8
2	Nandurbár... ...	10,922	...	...	396	154	71	46	...	...	7
3	Chopda	18,612	...	...	1,740	162	107	75	...	...	...
4	Nasirabad	12,176	...	...	214	146	51	96	...	1	2

DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *during the year 1902.*

		11	12	13										14
RIES.				RATIO OF DEATHS PER 1,000 OF POPULATION.										
Snake-bite, or killed by wild beasts.	Total.	All other causes.	Total Deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory Diseases.	Injuries.	All other causes.	From all Causes. For the year.	From all Causes. Mean of previous five years.	No.
123	424	5,780	60,441	·01	·23	14·77	13·70	8·23	2·92	·31	4·25	44·43	46·75	1
54	256	5,357	30,240	...	·07	8·57	14·33	5·75	3·21	·33	6·94	39·21	47·47	2
158	483	4,953	20,684	...	·01	1·96	15·09	1·40	·96	·61	6·31	26·36	40·47	3
51	234	3,961	14,942	...	·03	·82	14·45	2·32	·85	·40	6·81	25·69	35·16	4
24	215	7,127	22,612	...	·02	·37	9·89	5·30	3·94	·27	9·12	28·92	37·41	5
59	357	4,418	28,354	...	·02	6·75	14·06	5·07	2·79	·43	5·38	34·51	38·03	6
35	221	3,604	19,554	...	·04	5·86	13·39	5·68	1·74	·38	6·11	33·20	33·47	7
47	342	8,096	56,700	...	...	29·06	10·24	3·80	0·97	·31	7·39	51·78	39·62	8
227	475	5,287	21,109	...	·04	·27	7·85	2·78	2·60	·42	4·67	18·63	25·45	9
29	334	11,815	49,559	...	·08	26·13	6·68	3·92	3·16	·36	12·62	52·94	47·74	10
37	283	12,813	57,469	...	·21	29·74	11·32	1·72	2·45	·29	13·12	58·86	48·94	11
25	224	5,837	17,444	...	·04	2·11	9·38	2·61	1·97	·32	8·26	24·68	30·53	12
17	133	5,333	14,562	·06	1·27	1·83	16·04	1·39	·72	·32	12·49	34·12	32·23	13
34	197	1,657	18,413	...	·02	5·84	19·14	·31	7·49	·39	3·28	36·47	44·42	14
23	102	1,449	12,054	·01	...	7·33	29·43	·59	6·64	·43	6·07	50·50	64·00	15
54	372	8,156	37,057	·02	...	11·03	20·89	1·81	10·40	·58	12·62	57·35	55·83	16
29	100	682	6,282	...	...	2·51	20·43	·51	·87	·44	3·02	27·78	69·79	17
49	191	1,641	27,683	·01	...	1·45	39·50	1·82	2·47	·33	2·87	48·45	58·90	18
31	346	549	6,950	4·93	·09	·25	12·70	·21	·18	1·05	1·66	21·07	19·50	19
125	275	678	18,634	·99	·06	·62	17·17	·14	·24	·30	·74	20·26	16·45	20
50	92	128	7,130	·03	·02	...	19·16	·03	·01	·26	·36	19·86	25·96	21
72	214	528	16,768	...	·15	...	24·78	·03	·02	·33	·82	26·14	22·38	22
27	100	128	7,654	0·02	·04	...	16·36	·16	·19	·23	·29	17·30	22·12	23
17	62	28	3,643	...	·10	...	15·87	·07	·02	·28	·13	16·46	18·12	24
1,397	6,032	100,005	575,938	0·16	·10	8·70	14·87	2·97	2·44	·38	6·23	35·85	39·08	
...	8	106	3,378	...	·12	106·93	9·75	6·79	8·41	·32	4·29	136·62	50·20	
1	8	19	694	...	...	36·26	14·10	6·50	4·24	·73	1·74	63·54	115·89	1
1	1	98	2,183	...	...	93·49	8·70	5·75	4·03	·05	5·27	117·29	41·52	2
...	3	53	563	...	...	17·58	11·99	4·19	7·88	·25	4·35	46·24	35·83	3
														4

FORM No.

1	2	3	4	5	6	7	8	9	10		
											Injur
No.	Districts and Towns.	Population according to Census of 1901.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory diseases.	Suicide.		Wounding or Accident.
									Male.	Female.	
	B.—TOWNS—*continued.*										
	Násik District.										
5	Násik	21,490	...	1	721	560	249	220	...	...	21
6	Yeola	16,559	...	12	2,334	246	190	100	...	...	10
7	Devláli Cantonment.	2,894	...	...	16	24	3	3	...	...	...
8	Málegaon do. ...	3,222	...	...	18	29	8	40	...	...	...
	Thána District.										
9	Thána	15,410	...	...	128	195	77	50	...	...	6
10	Kalyán	10,749	...	1	237	85	40	49	...	1	6
11	City of Bombay ...	760,475	75	288	13,786	4,777	3,603	7,211	62	36	614
	Kolába District.										
12	Panvel	10,152	...	2	223	58	71	31	...	...	3
13	Alibág	5,996	...	...	42	15	8	5	1	...	...
14	Mahád	7,738	...	...	...	51	23	4	...	...	3
	Ahmednagar District.										
15	Ahmednagar ...	35,784	1	...	770	434	346	586	...	...	9
16	Sangamner... ...	13,801	...	...	22	59	63	67	1	...	3
17	Ahmednagar Cantonment.	5,370	...	...	...	13	3	14	2	...	1
	Poona District.										
18	Poona	120,543	6	5	2,780	904	1,488	680	...	...	18
19	Junnar	9,675	...	...	891	76	43	30	...	...	4
20	Poona Cantonment .	26,549	...	1	54	83	108	152	...	...	8
21	Kirkee do. ...	10,797	...	...	28	57	42	43	...	1	5
	Sholápur District.										
22	Sholápur	74,898	...	...	1,222	1,227	625	323	3	4	26
23	Bársi	24,242	...	...	1,346	423	243	83	...	...	21
24	Pandharpur ...	32,405	...	...	5	294	379	110	...	...	3
	Sátára District.										
25	Sátára	25,493	...	...	1,126	44	192	126	1	2	10
26	Wái	13,989	...	...	91	54	47	33	...	...	...
27	Karád	11,499	...	...	617	101	34	4	...	...	1
	Ratnágiri District.										
28	Vengurla	19,018	...	...	1	101	47	40	...	...	2
29	Ratnágiri	16,062	...	2	109	154	104	48	...	1	4

VI—*continued.*

		11	12	13									14
RIES.				RATIO OF DEATHS PER 1,000 OF POPULATION.									
Snake-bite, or killed by wild beasts.	Total.	All other causes.	Total Deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory diseases.	Injuries.	All other causes.	From all Causes. For the year.	From all Causes. Mean of previous five years.	No.
...	21	423	2,195	...	0·05	33·55	26·06	11·59	10·23	0·98	19·68	102·14	95·25	5
...	10	175	3,067	...	0·72	140·95	14·86	11·47	6·04	0·60	10·57	185·22	42·92	6
...	...	51	97	...	...	5·53	8·29	1·04	1·04	...	17·62	33·52	30·47	7
...	...	30	125	...	...	5·59	9·00	2·48	12·42	...	9·31	38·80	47·81	8
...	6	289	745	...	...	8·31	12·65	5·00	3·24	0·39	18·75	48·35	61·18	9
...	7	145	564	...	0·09	22·05	7·91	3·72	4·56	0·65	13·49	52·47	57·12	10
7	719	17,548	48,007	·10	0·38	18·13	6·30	4·74	9·48	0·94	23·07	63·13	73·60	11
...	3	128	516	...	0·20	21·97	5·71	6·99	3·05	0·29	12·61	50·83	51·59	12
...	1	61	132	...	...	7·01	2·50	1·33	0·83	0·17	10·17	22·01	44·02	13
...	3	73	154	...	...	...	6·59	2·97	0·52	0·39	9·43	19·90	32·49	14
...	9	619	2,765	0·03	...	21·52	12·13	9·67	16·38	0·25	17·29	77·27	60·97	15
...	4	161	376	...	...	1·59	4·28	4·56	4·85	0·29	11·67	27·24	44·85	16
...	3	24	57	...	...	...	2·42	0·56	2·61	0·56	4·47	10·61	19·05	17
1	19	279	6,161	0·05	0·04	23·06	7·50	12·34	5·64	0·16	2·31	51·11	76·49	18
...	4	110	654	...	...	40·41	7·86	4·44	3·10	0·41	11·37	67·60	34·50	19
...	8	216	622	...	0·04	2·03	3·13	4·07	5·73	0·30	8·14	23·43	45·08	20
...	6	57	233	...	...	2·59	5·28	3·89	3·99	0·56	5·28	21·58	39·65	21
1	34	576	4,007	...	...	16·32	16·38	8·34	4·31	0·45	7·69	53·50	59·39	22
1	22	278	2,395	...	...	55·52	17·45	10·02	3·42	0·91	11·67	98·80	64·82	23
2	5	377	1,170	...	...	0·15	9·07	11·70	3·39	0·15	11·63	36·11	52·49	24
1	14	222	1,724	...	...	44·17	1·73	7·53	4·94	0·55	8·71	67·63	45·83	25
1	1	129	355	...	...	6·51	3·86	3·36	2·36	0·07	9·22	25·38	55·11	26
...	1	89	846	...	...	53·66	8·78	2·96	·35	0·09	7·74	73·57	68·76	27
2	4	93	286	...	...	0·05	5·31	2·47	2·10	0·21	4·89	15·04	39·85	28
2	7	104	528	...	0·12	·6·79	9·59	6·47	2·99	0·44	6·47	32·87	30·21	29

FORM No.

1	2	3	4	5	6	7	8	9	10		
									Inju.		
No.	Districts and Towns.	Population according to Census of 1901.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory diseases.	Suicide.		Wounding or Accident.
									Male.	Female.	
	B.—TOWNS—*continued.*										
	Belgaum District.										
30	Belgaum	26,237	...	...	1,214	88	79	66	...	1	12
31	Gokák	9,860	...	...	1,195	43	82	50	1	...	10
32	Athni	11,107	...	1	71	43	102	39	...	1	6
33	Belgaum Cantonment.	8,927	1	1	266	71	20	18	1	...	2
	Dhárwár District.										
34	Dhárwár	30,593	...	68	1,375	414	84	71	...	...	26
35	Hubli	60,214	...	...	1,445	242	127	225	...	5	22
36	Gadag-Bettigeri ...	30,652	...	...	140	83	35	108	1	2	13
37	Ránebennur ...	14,851	...	...	698	40	13	32	...	...	7
	Bijápur District.										
38	Bijápur	23,776	...	2	8	68	72	123	...	1	7
39	Kaládgi	4,950	...	...	9	30	29	11	...	...	...
	Kánara District.										
40	Kárwár	16,774	...	43	...	111	21	7	...	...	3
41	Kumta	10,818	...	12	3	57	15	19	...	...	8
	Surat District.										
42	Surat	119,171	...	22	1,304	2,073	363	2,523	1	1	26
43	Bulsár	12,857	1	3	249	164	38	98	...	...	3
	Broach District.										
44	Broach	42,862	...	...	29	355	126	821	1	1	16
45	Jambusar	10,181	...	...	101	219	25	202	...	...	6
	Kaira District.										
46	Kaira	10,313	...	...	5	249	16	233	1	...	3
47	Nadiád	31,435	...	...	664	546	137	381	...	...	17
48	Borsad	13,001	...	...	576	142	21	143	...	...	8
49	Kapadvanj	15,405	...	...	6	323	56	268	1	...	8
	Panch Maháls District.										
50	Godhra	20,898	...	...	1,485	274	25	33	2	...	11
51	Dohad	13,990	...	...	3	410	18	23	1	...	10
	Ahmedabad District.										
52	Ahmedabad ...	181,151	1	...	11	7,359	197	1,982	2	2	39
53	Gogha	4,798	...	...	...	98	17	16	...	...	3
54	Viramgám	18,952	...	...	...	679	162	319	...	...	1
55	Dholka	14,971	...	...	...	655	72	85	...	1	6
56	Ahmedabad Cantonment.	4,115	...	...	...	54	1	...	...	...	...

VI—*continued.*

		11	12	13									14
BIES.				Ratio of Deaths per 1,000 of Population.									
Snake-bite, or killed by wild beasts.	Total.	All other causes.	Total Deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory diseases.	Injuries.	All other causes.	From all Causes. For the year.	From all Causes. Mean of previous five years.	No.
...	13	343	1,803	...	...	46·27	3·35	3·01	2·52	0·49	13·07	68·72	73·85	30
1	12	128	1,510	...	...	121·19	4·36	8·32	5·07	1·22	12·98	153·14	54·87	31
...	7	136	899	...	0·09	6·39	3·87	9·18	3·51	0·63	12·24	35·92	45·95	32
...	3	102	482	0·11	0·11	29·79	7·95	2·24	2·02	0·34	11·43	53·99	62·09	33
1	27	490	2,529	...	2·22	44·94	13·53	2·75	2·32	0·88	16·02	82·67	54·93	34
1	28	871	2,938	...	...	23·99	4·02	2·11	3·74	0·47	14·47	48·79	56·06	35
...	16	308	690	...	...	4·57	2·71	1·14	3·52	0·52	10·05	22·51	47·56	36
1	8	188	979	...	...	47·00	2·69	0·87	2·15	0·54	12·66	65·92	37·07	37
1	9	424	706	...	0·08	0·34	2·86	3·03	5·17	0·38	17·83	29·69	37·18	38
...	...	40	119	...	...	1·82	6·06	5·86	2·22	...	8·08	24·04	34·98	39
...	3	130	315	...	2·56	...	6·62	1·25	0·42	0·18	7·75	18·78	22·25	40
...	8	167	281	...	1·11	0·28	5·27	1·39	1·76	0·74	15·44	25·98	24·97	41
1	29	1,736	8,050	...	0·18	10·94	17·40	3·05	21·17	0·24	14·57	67·55	47·00	42
...	3	28	584	0·08	0·23	19·37	12·76	2·95	7·62	0·23	2·18	45·42	57·60	43
4	22	592	1,945	...	...	0·68	8·28	2·95	19·15	0·51	13·81	45·38	84·69	44
1	7	50	604	...	...	9·92	21·51	2·46	19·84	0·69	4·91	59·33	61·95	45
...	4	69	576	...	...	0·49	24·14	1·55	22·59	0·39	6·69	55·85	57·64	46
3	20	370	2,118	...	...	21·12	17·37	4·36	12·12	0·64	11·77	67·38	76·70	47
...	8	154	1,044	...	...	44·30	10·92	1·62	11·00	0·62	11·84	80·30	109·22	48
...	9	294	956	...	...	0·39	20·97	3·64	17·40	0·58	19·08	62 06	112·41	49
...	13	85	1,915	...	...	71·06	13·11	1·20	1·58	0·62	4·07	91·64	128·74	50
...	11	122	587	...	...	0·21	29·31	1·29	1·64	0·79	8·72	41·96	168·74	51
5	48	1,697	11,295	0·01	...	0·06	40·62	1·09	10·94	0·26	9·37	62·35	78·35	52
...	3	35	169	...	...	...	20·43	3·54	3·33	0·63	7·29	35·22	98·45	53
...	1	255	1,416	...	...	...	35·84	8·55	16·83	0·05	13·45	74·72	78·21	54
1	8	204	1,024	...	...	....	43·75	4·81	5·68	0·53	13·63	68·40	79·75	55
...	...	4	59	...	...	...	13·13	0·24	...	...	0·97	14·34	14·42	56

FORM No.

1	2	3	4	5	6	7	8	9	10		
									Inju		
No.	Districts and Towns.	Population according to Census of 1901.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhœa.	Respiratory diseases.	Suicide.		Wounding or Accident.
									Male.	Female.	
	B.—TOWNS—*concluded.*										
	Karáchi District.										
57	Karáchi	112,900	354	48	2,032	1,996	273	812	6	1	86
	Hyderabad District.										
58	Hyderabad ...	68,823	167	6	1,016	1,353	176	766	1	2	15
	Thar and Párkar District.										
59	Umarkot	4,899	...	...	1	309	...	...	...	...	2
	Lárkhána District.										
60	Lárkhána	14,543	...	2	4	628	3	9	...	1	6
	Sukkur District.										
61	Shikárpur	49,491	...	45	1	943	19	138	1	...	12
62	Sukkur	30,890	...	26	2	750	41	23	...	1	14
	Upper Sind Frontier District.										
63	Jacobabad	10,727	1	7	...	325	13	...	...	...	...
	Total of Towns ...	2,416,358	607	601	44,974	31,961	10,911	20,121	90	66	1,203
	Total for the Presidency.	18,481,362	3,229	2,189	184,752	270,845	58,682	59,379	280	279	5,435

VI—*concluded.*

RIES.		11	12	13										14
				Ratio of Deaths per 1,000 of Population.										
Snake-bite, or killed by wild beasts.	Total.	All other causes.	Total Deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dy-sentery and Diar-rhœa.	Injuries.	Respi-ratory diseases.	All other causes.	From all Causes.		No.
												For the year.	Mean of previous five years.	
...	93	1,500	7,108	3·14	·42	18·00	17·68	2·42	7·19	0·82	13·29	62·96	74·46	57
1	19	715	4,218	2·43	0·08	14·76	19·66	2·56	11·13	0·28	13·39	61·29	40·94	58
1	3	30	343	...	...	0·20	63·07	...	...	0·61	6·12	70·01	144·65	59
...	7	134	787	...	·14	0·28	48·18	0·21	0·62	0·48	9·21	54·12	41·57	60
1	14	769	1,929	...	·91	0·02	19·05	0·38	2·79	0·28	15·54	38·98	42·12	61
...	15	136	993	...	0·84	0·06	24·28	1·33	0·74	0·49	4·40	32·15	30·98	62
...	...	108	454	0·09	0·65	...	30·30	1·21	...	...	10·07	42·32	41·03	63
43	1,402	34,947	145,524	0·25	0·25	18·61	13·23	4·52	8·33	0·58	14·46	60·22	65·77	
1,440	7,434	134,952	721,462	0·17	0·12	10·00	14·66	3·18	3·21	0·40	7·30	39·04	42·40	

ANNUAL FORM No. VII.—DEATHS *registered from* CHOLERA *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1902.*

1	2	3		4		5												6			7			8	9
No.	Districts.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of Deaths per 1,000 of Population.			Mean ratio per 1,000 for previous five years.	No.
		Number in each District.	Number from which deaths from Cholera were reported.	Number in each District.	Number from which deaths from Cholera were reported.													Male.	Female.	Total.	Male.	Female.	Total.		
	Western Registration District.																								
1	Khándesh	25	2	2,641	2	...	14	...	...	...	...	...	...	1	...	...	...	5	10	15	...	·01	·01	3·25	1
2	Násik	16	1	1,645	1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...	3·09	2
3	Thána	11	2	1,631	3	...	...	1	...	1	1	...	...	...	...	...	...	2	1	3	...	...	...	5·04	3
4	City of Bombay ...	1	1	1	1	5	12	14	7	8	5	7	5	2	4	2	4	53	22	75	0·11	0·07	0·10	1·47	4
5	Kolába	11	1	1,481	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	...	...	...	3·60	5
	Central Registration District.																								
6	Ahmednagar	14	1	1,352	1	...	...	...	...	...	...	...	...	...	...	...	2	1	...	1	...	...	...	2·24	6
7	Poona	12	1	1,187	1	...	...	...	...	...	...	1	4	1	...	...	...	2	4	6	...	0·01	0·01	3·19	7
8	Sholápur	10	...	716	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·77	8
9	Sátára	15	...	1,342	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·75	9
10	Ratnágiri	10	...	1,306	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·44	10
	Southern Registration District.																								
11	Belgaum	11	1	1,073	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	3·86	11
12	Dhárwár	17	...	1,298	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·88	12
13	Bijápur...	10	...	1,117	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·66	13
14	Kánara	13	2	1,287	2	25	1	...	...	...	...	...	...	...	...	...	...	11	15	26	·05	·07	·06	0·60	14
	Gujarát Registration District.																								
15	Surat	10	1	776	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	2·14	15
16	Broach...	8	2	408	2	...	...	3	...	...	...	...	...	...	...	...	...	2	1	3	·01	...	·01	3·20	16
17	Kaira	11	1	605	1	...	...	...	10	...	...	...	...	...	...	...	...	4	6	10	·01	·02	·01	2·84	17
18	Panch Mahals ...	7	...	691	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·69	18
19	Ahmedabad	12	3	869	2	...	...	2	3	...	...	...	...	...	...	...	...	3	2	5	·01	·01	0·01	2·70	19
	Sind Registration District.																								
20	Karáchi	12	10	632	229	...	...	...	2	132	704	1,021	109	13	...	...	...	1,157	824	1,981	4·70	4·19	4·47	2·98	20
21	Hyderabad	13	11	1,411	128	...	...	...	...	...	81	635	252	101	9	...	...	653	425	1,078	1·20	0·96	1·09	1·35	21
22	Thar and Párkar ...	9	1	668	6	...	...	...	...	...	...	9	1	...	...	...	...	7	3	10	0·03	0·02	0·03	2·23	22
23	Lárkhána	11	...	712	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·54	23
24	Sukkur...	9	1	609	2	...	...	...	...	...	...	3	7	1	...	...	...	3	8	11	0·01	0·03	0·02	...	24
25	Upper Sind Frontier .	5	1	390	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	·01	...	...	0·29	25
	Total for the Presidency.	283	43	25,848	384	31	28	20	22	141	791	1,676	379	121	13	2	6	1,906	1,323	3,229	0·20	0·15	0·17	2·64	

ANNUAL FORM No. VIII.—DEATHS *registered from* SMALL-POX *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1902.*

1	2	3		4		5												6			7		8			9	10
No.	Districts.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Number of these Deaths among Children.		Total Ratio of Deaths per 1,000 of Population.			Mean ratio per 1,000 for previous five years.	No.
		Number in each District.	Number from which deaths from Small-pox were reported.	Number in each District.	Number from which deaths from Small-pox were reported.													Male.	Female.	Total.	Under 1 year.	Under 10 years.	Male.	Female.	Total.		
	Western Registration District.																										
1	Khándesh	25	12	2,641	66	32	76	109	49	23	6	6	2	1	...	...	6	166	144	310	107	186	0·23	0·20	0·22	0·48	1
2	Násik	16	9	1,645	12	2	1	3	4	5	4	...	...	...	...	2	47	40	28	68	19	46	0·09	0·07	0·08	0·17	2
3	Thána	11	4	1,631	5	...	2	...	4	1	1	1	1	1	1	...	...	3	9	12	3	7	...	0·02	0·01	0·36	3
4	City of Bombay... ...	1	1	1	1	13	32	35	35	38	31	24	21	15	10	8	26	149	139	288	87	97	0·31	0·47	0·38	0·92	4
5	Kolába	11	8	1,481	16	7	...	3	2	4	...	1	2	1	...	2	...	14	8	22	6	13	0·05	0·03	0·03	0·40	5
	Central Registration District.																										
6	Ahmednagar	14	7	1,352	13	3	2	5	4	...	1	2	...	1	...	...	1	9	10	19	4	10	0·02	0·02	0·02	0·11	6
7	Poona	12	8	1,187	9	2	4	8	4	2	...	2	...	1	...	1	2	13	13	26	10	13	0·03	0·03	0·03	0·19	7
8	Sholápur	10	4	716	10	...	8	6	1	3	...	1	1	1	...	...	...	10	11	21	8	8	0·03	0·03	0·03	0·14	8
9	Sátára	15	...	1,342	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·07	9
10	Ratnágiri	10	7	1,306	22	6	11	3	5	6	12	...	3	1	1	...	1	22	27	49	14	15	0·04	0·04	0·04	0·30	10
	Southern Registration District.																										
11	Belgaum	11	8	1,073	24	7	15	22	12	3	2	7	...	5	...	...	...	32	41	73	16	26	0·06	0·08	0·07	0·16	11
12	Dhárwár...	17	13	1,298	73	58	53	72	36	15	10	17	6	4	2	4	1	135	141	276	63	121	0·24	0·26	0·25	0·33	12
13	Bijápur	10	8	1,117	22	7	4	3	7	4	...	3	...	...	2	1	1	15	17	32	10	11	0·04	0·05	0·04	0·14	13
14	Kánara	13	12	1,287	103	86	83	115	102	57	49	50	22	6	12	12	4	394	294	598	121	150	1·29	1·35	1·32	0·69	14
	Gujarát Registration District.																										
15	Surat	10	7	776	7	1	3	1	7	8	2	4	1	...	1	1	4	20	13	33	12	10	0·06	0·04	0·05	0·07	15
16	Broach	8	...	408	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·23	16
17	Kaira	11	...	605	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	17
18	Panch Mahals	7	...	691	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	18
19	Ahmedabad	12	...	869	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	19
	Sind Registration District.																										
20	Karáchi	12	7	632	21	19	15	14	15	7	5	1	1	...	...	...	...	50	27	77	14	18	0·20	0·14	0·17	0·32	20
21	Hyderabad	13	7	1,411	18	6	3	15	15	9	3	6	...	1	3	1	...	40	22	62	18	28	0·07	0·05	0·06	0·14	21
22	Thar and Párkar ...	9	1	668	3	...	2	...	6	...	...	...	...	...	...	...	...	4	4	8	2	3	0·02	0·02	0·02	0·25	22
23	Lárkhána...	11	11	712	29	10	35	6	5	23	6	1	...	6	...	...	4	42	54	96	17	47	0·12	0·18	0·15	0·03	23
24	Sukkur	9	8	609	11	15	23	17	13	10	9	2	...	...	...	1	...	49	41	90	26	44	0·17	0·17	0·17	0·14	24
25	Upper Sind Frontier ...	5	5	390	17	4	12	6	3	4	...	...	...	...	...	...	...	15	14	29	3	8	0·12	0·14	0·13	0·10	25
	Total for the Presidency.	283	147	25,848	482	276	384	443	329	222	141	128	60	44	32	33	97	1,132	1,057	2,189	580	861	0·12	0·11	0·12	0·24	

ANNUAL FORM NO. IX.—DEATHS *registered from* FEVERS *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1902.*

1	2	3		4		5												6			7			8	9
Number.	Districts.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of Deaths per 1,000 of Population.			Mean ratio per 1,000 for previous five years.	Number.
		Number in each District.	Number from which deaths from fevers were reported.	Number in each District.	Number from which deaths from fevers were reported.													Male.	Female.	Total.	Male.	Female.	Total.		
	Western Registration District.																								
1	Khándesh	25	25	2,641	2,302	1,266	1,677	1,635	1,591	1,029	943	978	1,544	1,897	2,035	2,425	2,271	9,731	9,610	19,341	13·21	13·62	13·56	22·02	1
2	Násik	16	16	1,645	1,540	925	895	1,049	972	679	661	786	978	1,081	987	1,601	1,371	6,183	5,732	11,915	14·98	14·23	14·61	19·39	2
3	Thána	11	11	1,631	1,534	1,133	959	1,021	927	747	772	755	922	1,173	977	1,303	1,342	6,356	5,764	12,120	15·06	14·82	14·95	19·67	3
4	City of Bombay ...	1	1	1	1	597	718	934	466	221	216	279	329	325	266	213	213	2,967	1,810	4,777	6·32	6·21	6·29	10·42	4
5	Kolába	11	11	1,481	1,318	825	637	690	606	539	563	593	811	854	637	860	926	4,387	4,144	8,531	14·44	13·76	14·09	16·44	5
	Central Registration District.																								
6	Ahmednagar ...	14	14	1,352	1,175	501	455	668	808	638	525	703	743	640	669	1,021	859	4,168	4,072	8,240	9·99	9·70	9·85	11·67	6
7	Poona	12	12	1,187	1,124	946	806	1,030	931	871	763	925	1,023	1,117	1,153	1,667	1,439	6,379	6,292	12,671	12·80	12·82	12·81	17·21	7
8	Sholápur	10	10	716	663	601	596	633	842	912	581	714	778	855	1,066	1,231	970	4,929	4,900	9,829	13·60	13·68	13·63	14·75	8
9	Sátára	15	15	1,342	1,179	816	772	852	712	759	753	909	1,064	1,058	976	1,478	1,202	5,739	5,672	11,411	10·09	9·82	9·96	10·66	9
10	Ratnágiri	10	10	1,306	1,303	699	834	612	999	636	729	800	783	792	436	933	909	4,695	4,456	9,151	8·58	7·18	7·84	13·61	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	995	572	524	503	469	480	460	462	471	511	621	676	756	3,294	3,201	6,495	6·57	6·51	6·55	6·63	11
12	Dhárwár	17	17	1,298	1,193	1,346	1,131	959	802	730	644	733	861	1,049	1,084	1,222	1,273	6,075	5,758	11,833	10·84	10·43	10·64	11·70	12
13	Bijápur	10	10	1,117	1,014	502	458	475	582	613	474	587	572	605	648	692	527	3,450	3,275	6,725	9·37	8·91	9·14	11·05	13
14	Kánara	13	13	1,287	1,113	827	691	625	511	456	487	573	527	561	534	539	683	3,505	3,512	7,017	14·85	16·08	15·44	16·09	14
	Gujarát Registration District.																								
15	Surat	10	10	776	715	823	854	1,143	772	605	621	760	886	948	1,116	1,603	1,770	5,747	6,154	11,901	18·09	19·28	18·69	23·24	15
16	Broach	8	8	408	387	859	797	866	506	362	292	367	393	389	712	1,064	993	3,713	3,887	7,600	25·00	27·14	26·05	39·47	16
17	Kaira	11	11	605	570	1,663	1,683	2,586	1,270	658	474	538	626	728	1,268	1,684	1,384	7,037	7,070	14,767	20·47	20·75	20·60	23·55	17
18	Panch Mahals ...	7	7	691	579	619	719	457	439	349	330	331	319	299	359	489	405	2,699	2,605	5,304	20·44	20·21	20·33	11·97	18
19	Ahmedabad ...	12	12	869	847	3,209	3,333	3,610	2,421	1,643	1,274	1,313	1,676	1,928	2,980	4,324	3,705	16,159	15,257	31,416	39·64	39·35	39·50	13·73	19
	Sind Registration District.																								
20	Karáchi	12	11	632	633	722	583	502	406	326	442	457	423	340	493	713	767	3,330	2,854	6,184	13·52	14·52	13·97	13·87	20
21	Hyderabad	13	13	1,411	1,412	2,305	1,863	1,865	1,547	1,056	965	1,129	858	893	1,271	1,654	1,742	9,431	7,717	17,148	17·34	17·36	17·35	13·72	21
22	Thar and Párkar ...	9	9	668	669	1,003	799	801	605	464	335	374	236	316	547	814	892	3,884	3,302	7,186	19·16	20·49	19·75	23·75	22
23	Lárkhána	11	11	712	713	2,247	1,327	1,447	1,270	1,211	986	931	821	972	1,504	2,119	1,690	8,594	7,931	16,525	24·27	26·26	25·19	21·66	23
24	Sukkur	9	9	609	611	1,127	860	811	764	758	577	548	466	544	777	1,017	683	4,686	4,246	8,932	16·64	17·59	17·08	17·44	24
25	Upper Sind Frontier	5	5	390	391	383	341	311	308	270	253	243	177	255	374	536	385	2,029	1,807	3,836	15·62	17·69	16·54	17·33	25
	Total for the Presidency ...	283	282	25,848	23,985	26,506	24,499	26,335	21,526	17,010	15,100	16,828	18,292	20,072	23,490	32,012	29,166	139,917	131,029	270,945	14·65	14·64	14·66	17·94	

ANNUAL FORM NO. IX-A.—DEATHS *registered from* PLAGUE *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1902.*

1	2	3		4		5												6			7			8	9
Number.	Districts.	Circles of Registration.		Villages.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of Deaths per 1,000 of Population.			Mean ratio per 1,000 for previous five years.	Number.
		Number in each District.	Number from which deaths from Plague were reported.	Number in each District.	Number from which deaths from Plague were reported.													Male.	Female.	Total.	Male.	Female.	Total.		
	Western Registration District.																								
1	Khándesh	25	25	2,641	326	1,129	2,819	3,296	1,085	30	...	...	435	4,437	4,652	2,875	4,327	12,823	12,262	25,085	17·77	17·39	17·58	0·56	1
2	Násik	16	16	1,645	142	307	180	203	64	25	21	53	1,015	2,436	1,664	1,273	2,166	5,092	4,605	9,697	12·34	11·43	11·11	3·23	2
3	Thána	11	10	1,631	59	133	194	181	155	83	52	87	233	214	219	117	237	1,082	823	1,905	2·57	2·12	2·35	4·21	3
4	City of Bombay ...	1	1	1	1	1,297	2,528	3,596	2,788	1,176	269	129	152	230	536	515	570	9,137	4,619	13,786	19·47	16·90	18·13	19·19	4
5	Kolába... ...	11	9	1,481	57	72	92	94	67	13	8	22	66	99	81	52	77	404	339	743	1·33	1·13	1·23	1·33	5
	Central Registration District.																								
6	Ahmednagar	14	11	1,352	26	11	3	...	1	...	...	...	9	14	81	215	749	609	475	1,093	1·49	1·13	1·29	·80	6
7	Poona	12	12	1,187	162	1,824	907	311	64	4	2	41	438	903	1,034	1,215	2,057	4,388	4,412	8,800	8·80	8·99	8·89	7·34	7
8	Sholápur	10	10	716	109	333	757	592	102	2	1	45	180	445	282	912	2,376	2,958	3,069	6,027	8·16	8·57	8·36	1·83	8
9	Sátára	15	14	1,342	523	3,510	3,004	2,357	676	195	184	1,138	3,724	5,021	5,048	3,491	4,411	15,543	18,116	33,659	27·32	31·39	29·37	8·11	9
10	Ratnágiri	10	7	1,306	26	35	69	87	38	17	23	22	25	61	15	12	12	205	211	416	0·37	0·34	0·36	·28	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	384	3,321	2,300	1,396	594	189	293	812	1,986	3,354	4,759	3,891	4,320	13,238	13,967	27,205	26·42	28·44	27·43	13·57	11
12	Dhárwár	17	16	1,298	530	3,422	2,354	941	281	146	472	1,263	2,864	4,121	5,995	5,389	5,442	16,225	16,465	32,690	28·94	29·83	29·38	13·9	12
13	Bijápur	10	9	1,117	50	6	8	9	2	...	...	...	3	...	92	479	909	761	747	1,508	2·07	2·03	2·05	1·07	13
14	Kánara	13	7	1,287	32	78	16	2	8	2	24	35	63	161	194	167	26	413	363	776	1·75	1·66	1·71	0·49	14
	Gujarát Registration District.																								
15	Surat	10	9	776	109	280	292	487	378	99	36	263	527	635	549	375	581	2,287	2,215	4,502	7·20	6·94	7·07	3·25	15
16	Broach...	8	8	408	87	419	665	579	137	23	15	9	...	2	11	11	8	883	997	1,879	5·94	6·96	6·44	2·03	16
17	Kaira	11	11	605	159	385	1,306	2,581	663	8	...	...	71	374	865	1,026	1,194	3,097	4,636	8,383	9·44	13·76	11·71	0·56	17
18	Panch Mahals... ...	7	6	691	44	8	40	95	118	25	3	...	31	105	707	573	350	968	1,037	2,005	7·33	8·13	7·87	·57	18
19	Ahmedabad	12	2	869	28	...	...	8	1	...	...	...	...	1	153	201	378	441	397	837	1·08	1·02	1·05	0·07	19
	Sind Registration District.																								
20	Karáchi	12	3	632	7	148	204	384	528	370	135	99	25	50	46	54	72	1,258	859	2,115	5·10	4·37	4·98	6·85	20
21	Hyderabad	13	8	1,411	40	35	463	879	270	9	1	...	8	62	48	77	35	933	599	1,597	1·82	1·35	1·61	0·34	21
22	Thar and Párkar ...	9	1	668	1	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	22
23	Lárkhána	11	3	712	3	...	...	6	...	...	...	...	...	...	...	...	...	5	1	6	0·01	...	0·01	0·01	23
24	Sukkur...	9	4	609	4	...	3	4	...	...	...	...	...	...	...	...	...	2	5	7	...	0·02	0·01	·29	24
25	Upper Sind Frontier.	5	...	390	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·01	25
	Total for the Presidency ...	283	213	25,848	2,909	16,753	17,404	18,689	8,020	2,416	1,530	4,018	11,855	23,625	27,026	23,000	30,537	93,442	91,350	184,792	9·80	10·20	10·00	4·17	

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ANNUAL FORM No. X.—DEATHS *registered from* DYSENTERY *and* DIARRHŒA *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1902.*

1	2	3		4		5											6			7			8	9
Number.	Districts.	CIRCLES OF REGISTRATION.		VILLAGES.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for previous five years.	Number.
		Number in each District.	Number from which Deaths from Dysentery and Diarrhœa were reported.	Number in each District.	Number from which Deaths from Dysentery and Diarrhœa were reported.													Male.	Female.	Total.	Male.	Female.	Total.		
	Western Registration District.																							
1	Khándesh ...	25	25	2,641	1,804	656	763	769	903	820	737	774	1,034	1,314	1,300	1,244	1,278	6,227	5,365	11,592	8·63	7·61	8·12	9·46	1
2	Násik	16	16	1,645	1,088	301	194	307	373	372	339	450	521	589	479	464	493	2,749	2,133	4,882	6·66	5·30	5·99	8·54	2
3	Thána	11	11	1,631	397	83	74	70	96	79	100	114	191	151	116	100	47	671	550	1,221	1·59	1·41	1·51	2·47	3
4	City of Bombay...	1	1	1	1	309	298	324	317	273	219	294	366	381	287	257	278	2,022	1,581	3,603	4·31	5·43	4·74	5·89	4
5	Kolába	11	11	1,481	531	100	92	97	103	113	92	158	212	169	115	86	113	625	625	1,450	2·71	2·07	2·40	4·34	5
	Central Registration District.																							
6	Ahmednagar ...	14	14	1,352	923	304	255	283	355	326	369	461	571	497	413	408	375	2,449	2,108	4,557	5·87	5·02	5·45	10·19	6
7	Poona	12	12	1,187	767	371	285	346	335	388	429	578	709	697	637	563	510	3,183	2,665	5,848	6·39	5·43	5·91	7·80	7
8	Sholápur	10	10	716	491	274	211	308	359	271	151	331	423	461	693	610	499	2,380	2,211	4,591	6·57	6·18	6·37	11·72	8
9	Sátára	15	15	1,342	755	446	227	347	333	224	262	455	505	427	395	410	404	2,197	2,238	4,435	3·86	3·88	3·87	6·56	9
10	Ratnágiri ...	10	10	1,306	883	143	163	172	321	274	248	263	409	369	146	388	404	1,721	1,579	3,300	3·14	2·54	2·83	4·51	10
	Southern Registration District.																							
11	Belgaum	11	11	1,073	692	307	266	299	268	331	351	432	447	367	342	273	268	1,957	1,994	3,951	3·91	4·06	3·98	5·83	11
12	Dhárwár ...	17	17	1,298	501	168	139	137	146	142	181	219	226	199	152	100	132	998	943	1,941	1·78	1·71	1·74	2·38	12
13	Bijápur	10	10	1,117	520	127	88	63	81	97	134	249	290	253	245	159	159	923	1,022	1,945	2·51	2·78	2·64	4·41	13
14	Kánara	13	13	1,287	202	65	58	66	47	35	50	52	75	51	48	41	45	332	300	633	1·41	1·37	1·39	2·13	14
	Gujarát Registration District.																							
15	Surat	10	10	776	79	51	47	53	28	27	33	49	57	59	48	39	66	275	282	557	0·81	0·88	0·88	1·63	15
16	Broach	8	8	408	64	26	30	25	20	8	17	20	26	36	30	35	19	149	143	292	1·00	1·00	1·00	4·05	16
17	Kaira	11	11	605	279	119	121	156	80	70	63	104	140	123	137	172	115	814	586	1,400	2·17	1·72	1·95	5·57	17
18	Panch Mahális ...	7	7	691	28	6	8	17	13	13	22	26	20	20	5	5	3	75	83	158	0·57	0·64	0·60	13·01	18
19	Ahmedabad ...	12	12	869	104	123	110	125	73	60	75	112	197	202	154	134	124	868	621	1,489	2·13	1·60	1·87	3·53	19
	Sind Registration District.																							
20	Karáchi	12	9	632	23	15	23	25	46	32	27	34	31	27	33	24	26	199	144	343	0·81	0·73	0·77	1·17	20
21	Hyderabad ...	13	12	1,411	43	20	34	36	38	19	18	40	38	40	13	4	1	186	115	301	0·34	0·26	0·30	0·39	21
22	Thar and Párkar.	9	5	668	7	...	4	...	1	1	1	...	1	...	...	2	2	8	4	12	0·04	0·02	0·04	0·14	22
23	Lárkhána ...	11	8	712	11	5	...	2	...	...	4	1	...	4	3	1	4	16	8	24	0·05	0·03	0·04	0·12	23
24	Sukkur	9	7	609	13	22	6	9	14	15	4	2	11	10	10	13	13	86	43	129	0·31	0·18	0·25	0·44	24
25	Upper Sind Frontier.	5	4	390	5	4	1	2	...	...	1	2	1	3	9	3	2	22	6	28	0·17	0·05	0·12	0·03	25
	Total for the Presidency ...	283	269	25 848	10,208	4,045	3,497	4,038	4,350	3,990	3,867	5,220	6,501	6,449	5,810	5,535	5,380	31,333	27,349	58,682	3·29	3·05	3·17	5·29	